

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: February 24, 2006, 10:29:45 ; Search time 18 Seconds
(without alignments)
7.444 Million cell updates/sec

Title: US-10-019-513-1

Perfect score: 49

Sequence: 1 STAPPVHV 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 117670 segs, 14887254 residues

Total number of hits satisfying chosen parameters: 34777

Minimum DB seq length: 0

Maximum DB seq length: 9

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : Published Applications AA.New.*

1: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pap.*
2: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pap.*
3: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pap.*
4: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pap.*
5: /cgn2_6/ptodata/2/pubpaa/US05_NEW_PUB.pap.*
6: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pap.*
7: /cgn2_6/ptodata/2/pubpaa/US11_NEW_PUB.pap.*
8: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	49	100.0	9	6	US-10-401-386B-52
2	49	100.0	9	6	US-10-517-784-35
3	39	79.6	9	6	US-10-401-386B-56
4	24	49.0	8	7	US-11-045-024-6286
5	24	49.0	8	7	US-11-045-024-6385
6	24	49.0	8	7	US-11-045-024-6287
7	24	49.0	8	7	US-11-045-024-9105
8	24	49.0	9	7	US-11-011-666-5
9	24	49.0	9	7	US-11-045-024-146
10	24	49.0	9	7	US-11-045-024-148
11	24	49.0	9	7	US-11-045-024-2988
12	24	49.0	9	7	US-11-045-024-4112
13	24	49.0	9	7	US-11-045-024-4114
14	24	49.0	9	7	US-11-045-024-5659
15	24	49.0	9	7	US-11-045-024-6287
16	24	49.0	9	7	US-11-045-024-6387
17	24	49.0	9	7	US-11-045-024-8861
18	24	49.0	9	7	US-11-045-024-8862
19	24	49.0	9	7	US-11-045-024-9107
20	24	49.0	9	7	US-11-045-024-11134
21	23	46.9	7	7	US-11-031-737A-40
22	23	46.9	7	7	US-11-031-482-40
23	23	46.9	8	7	US-11-045-024-5300
24	23	46.9	8	7	US-11-045-024-6267
25	23	46.9	8	7	US-11-045-024-6353

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117	19	38.8	8	7	US-11-045-024-7362	Sequence 7362, Ap	190	18	36.7	8	7	US-11-045-024-4879	Sequence 4879, Ap
118	19	38.8	8	7	US-11-045-024-9002	Sequence 9002, Ap	191	18	36.7	8	7	US-11-045-024-5308	Sequence 5308, Ap
119	19	38.8	8	7	US-11-045-024-9087	Sequence 9087, Ap	192	18	36.7	8	7	US-11-045-024-7753	Sequence 7753, Ap
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131	19	38.8	9	6	US-10-989-767A-467	Sequence 467, App	204	18	36.7	8	7	US-11-129-741-1896	Sequence 1896, Ap
132	19	38.8	9	6	US-10-989-767A-552	Sequence 552, App	205	18	36.7	8	7	US-11-247-423-291	Sequence 291, App
133	19	38.8	9	7	US-11-040-159-122	Sequence 122, App	206	18	36.7	8	7	US-11-247-423-538	Sequence 538, App
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285	17	34.7	6	7	US-11-121-612-404	Sequence 404, App	358	17	34.7	9	6	US-10-857-484-1595	Sequence 1596, Ap
286	17	34.7	6	7	US-11-078-256-4	Sequence 4, Appl	359	17	34.7	9	6	US-10-857-484-1596	Sequence 1983, Ap
287	17	34.7	6	7	US-10-467-657-9078	Sequence 9078, Ap	360	17	34.7	9	6	US-10-857-484-2004	Sequence 2018, Ap
288	17	34.7	6	7	US-10-895-064-1514	Sequence 1514, Ap	361	17	34.7	9	6	US-10-857-484-2004	Sequence 2035, Ap
289	17	34.7	6	7	US-11-106-932-140	Sequence 140, App	362	17	34.7	9	6	US-10-857-484-2035	Sequence 2059, Ap
290	17	34.7	7	7	US-11-078-256-6	Sequence 6, Appl	363	17	34.7	9	6	US-10-857-484-2059	Sequence 2077, Ap
291	17	34.7	7	7	US-11-129-741-1514	Sequence 1514, Ap	364	17	34.7	9	6	US-10-857-484-2141	Sequence 2137, Ap
292	17	34.7	8	6	US-10-857-484-2705	Sequence 2705, Ap	365	17	34.7	9	6	US-10-857-484-2141	Sequence 2141, Ap
293	17	34.7	8	6	US-11-045-024-1081	Sequence 1081, Ap	366	17	34.7	9	6	US-10-857-484-2145	Sequence 2145, Ap
294	17	34.7	8	7	US-11-045-024-1082	Sequence 1082, Ap	367	17	34.7	9	6	US-10-857-484-2151	Sequence 2151, Ap
295	17	34.7	8	7	US-11-045-024-3172	Sequence 3172, Ap	368	17	34.7	9	6	US-10-857-484-2152	Sequence 2152, Ap
296	17	34.7	8	7	US-11-045-024-3183	Sequence 3183, Ap	369	17	34.7	9	6	US-10-857-484-2154	Sequence 2154, Ap
297	17	34.7	8	7	US-11-045-024-3184	Sequence 3184, Ap	370	17	34.7	9	6	US-10-857-484-2545	Sequence 2545, Ap
298	17	34.7	8	7	US-11-045-024-4024	Sequence 4024, Ap	371	17	34.7	9	6	US-10-857-484-2581	Sequence 2581, Ap
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393	17	34.7	9	6	US-10-857-484-3255	Sequence 3255, Ap	466	17	34.7	9	6	US-10-857-484-5161	Sequence 5161, Ap
394	17	34.7	9	6	US-10-857-484-3257	Sequence 3257, Ap	467	17	34.7	9	6	US-10-857-484-5162	Sequence 5162, Ap
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396	17	34.7	9	6	US-10-857-484-3266	Sequence 3266, Ap	469	17	34.7	9	6	US-10-857-484-5168	Sequence 5168, Ap
397	17	34.7	9	6	US-10-857-484-3271	Sequence 3271, Ap	470	17	34.7	9	6	US-10-857-484-5169	Sequence 5169, Ap
398	17	34.7	9	6	US-10-857-484-3273	Sequence 3273, Ap	471	17	34.7	9	6	US-10-857-484-5219	Sequence 5219, Ap
399	17	34.7	9	6	US-10-857-484-3277	Sequence 3277, Ap	472	17	34.7	9	7	US-11-097-864-577	Sequence 577, App
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402	17	34.7	9	6	US-10-857-484-3741	Sequence 3741, Ap	475	17	34.7	9	7	US-11-045-024-1198	Sequence 1198, Ap
403	17	34.7	9	6	US-10-857-484-3758	Sequence 3758, Ap	476	17	34.7	9	7	US-11-045-024-1199	Sequence 1199, Ap
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405	17	34.7	9	6	US-10-857-484-3823	Sequence 3823, Ap	478	17	34.7	9	7	US-11-045-024-2487	Sequence 2487, Ap
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407	17	34.7	9	6	US-10-857-484-3832	Sequence 3832, Ap	480	17	34.7	9	7	US-11-045-024-3258	Sequence 3258, Ap
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412	17	34.7	9	6	US-10-857-484-3846	Sequence 3846, Ap	485	17	34.7	9	7	US-11-045-024-4886	Sequence 4886, Ap
413	17	34.7	9	6	US-10-857-484-4146	Sequence 4146, Ap	486	17	34.7	9	7	US-11-045-024-5183	Sequence 5183, Ap
414	17	34.7	9	6	US-10-857-484-4153	Sequence 4153, Ap	487	17	34.7	9	7	US-11-045-024-5184	Sequence 5184, Ap
415	17	34.7	9	6	US-10-857-484-4156	Sequence 4156, Ap	488	17	34.7	9	7	US-11-045-024-5185	Sequence 5185, Ap
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417	17	34.7	9	6	US-10-857-484-4197	Sequence 4197, Ap	490	17	34.7	9	7	US-11-045-024-5339	Sequence 5339, Ap
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419	17	34.7	9	6	US-10-857-484-4200	Sequence 4200, Ap	492	17	34.7	9	7	US-11-045-024-6370	Sequence 6370, Ap
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423	17	34.7	9	6	US-10-857-484-4279	Sequence 4279, Ap	496	17	34.7	9	7	US-11-045-024-7217	Sequence 7217, Ap
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543	16	32.7	4	7	US-11-031-737A-48	Sequence 48, Appl	616	16	32.7	9	6	US-10-857-484-2607	Sequence 2607, Ap
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550	16	32.7	7	6	US-10-467-657-8820	Sequence 8820, Ap	623	16	32.7	9	6	US-10-857-484-3161	Sequence 3161, Ap
551	16	32.7	7	6	US-10-895-064-2517	Sequence 2517, Ap	624	16	32.7	9	6	US-10-857-484-3176	Sequence 3176, Ap
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559	16	32.7	7	7	US-11-225-686-3593	Sequence 3593, Ap	632	16	32.7	9	6	US-10-857-484-4147	Sequence 4147, Ap
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572	16	32.7	8	7	US-11-045-024-5416	Sequence 5416, Ap	645	16	32.7	9	6	US-10-857-484-4794	Sequence 4794, Ap
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581	16	32.7	9	6	US-10-895-064-1775	Sequence 1775, Ap	654	16	32.7	9	6	US-10-857-484-5033	Sequence 5033, Ap
582	16	32.7	9	6	US-10-895-064-2898	Sequence 2898, Ap	655	16	32.7	9	6	US-10-857-484-5102	Sequence 5102, Ap
583	16	32.7	9	6	US-10-989-767A-25	Sequence 25, Appl	656	16	32.7	9	6	US-10-857-484-5103	Sequence 5103, Ap
584	16	32.7	9	6	US-10-989-767A-46	Sequence 46, Appl	657	16	32.7	9	6	US-10-857-484-5114	Sequence 5114, Ap
585	16	32.7	9	6	US-10-989-767A-110	Sequence 110, Appl	658	16	32.7	9	6	US-10-857-484-5120	Sequence 5120, Ap
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587	16	32.7	9	6	US-10-989-767A-210	Sequence 210, Appl	660	16	32.7	9	7	US-11-010-748A-302	Sequence 302, App
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589	16	32.7	9	6	US-10-989-767A-483	Sequence 483, Appl	662	16	32.7	9	7	US-11-010-748A-306	Sequence 306, App
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592	16	32.7	9	6	US-10-857-484-317	Sequence 317, Appl	665	16	32.7	9	7	US-11-045-024-2491	Sequence 2491, App
593	16	32.7	9	6	US-10-857-484-335	Sequence 335, Appl	666	16	32.7	9	7	US-11-045-024-3724	Sequence 3724, App
594	16	32.7	9	6	US-10-857-484-343	Sequence 343, Appl	667	16	32.7	9	7	US-11-045-024-5417	Sequence 5417, App
595	16	32.7	9	6	US-10-857-484-369	Sequence 369, Appl	668	16	32.7	9	7	US-11-045-024-6259	Sequence 6259, App
596	16	32.7	9	6	US-10-857-484-373	Sequence 373, Appl	669	16	32.7	9	7	US-11-045-024-10368	Sequence 10368, A
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601	16	32.7	9	6	US-10-857-484-944	Sequence 944, Appl	674	16	32.7	9	7	US-11-033-039-548	Sequence 548, App
602	16	32.7	9	6	US-10-857-484-1430	Sequence 1430, Appl	675	16	32.7	9	7	US-11-033-039-684	Sequence 684, App
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604	16	32.7	9	6	US-10-857-484-1442	Sequence 1442, Appl	677	16	32.7	9	7	US-11-041-893-152	Sequence 152, App
605	16	32.7	9	6	US-10-857-484-1483	Sequence 1483, Appl	678	16	32.7	9	7	US-11-104-117-14	Sequence 14, Appl
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607	16	32.7	9	6	US-10-857-484-1511	Sequence 1511, Appl	680	16	32.7	9	7	US-11-116-203-78	Sequence 78, Appl
608	16	32.7	9	6	US-10-857-484-1999	Sequence 1999, Appl	681	16	32.7	9	7	US-11-233-252-14	Sequence 14, Appl
609	16	32.7	9	6	US-10-857-484-2001	Sequence 2001, Appl	682	16	32.7	9	7	US-11-233-683-6	Sequence 6, Appl

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685	16	32.7	9	7	US-11-031-482-46	Sequence 46, Appl	758	15	30.6	8	7	US-11-045-024-6174	Sequence 6174, Ap
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687	16	32.7	9	7	US-11-129-741-2898	Sequence 2898, Ap	760	15	30.6	8	7	US-11-045-024-6820	Sequence 6820, Ap
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695	15	30.6	5	7	US-11-249-847-214	Sequence 214, App	768	15	30.6	8	7	US-11-045-024-9814	Sequence 9814, Ap
696	15	30.6	5	7	US-11-249-847-254	Sequence 254, App	769	15	30.6	8	7	US-11-045-024-9815	Sequence 9815, Ap
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708	15	30.6	6	6	US-10-857-435A-500	Sequence 500, App	781	15	30.6	8	7	US-11-066-967-120	Sequence 120, App
709	15	30.6	6	6	US-10-857-435A-501	Sequence 501, App	782	15	30.6	8	7	US-11-066-967-130	Sequence 130, App
710	15	30.6	6	6	US-10-857-435A-502	Sequence 502, App	783	15	30.6	8	7	US-11-066-967-133	Sequence 133, App
711	15	30.6	6	6	US-10-857-435A-519	Sequence 519, App	784	15	30.6	8	7	US-11-129-741-1881	Sequence 1881, Ap
712	15	30.6	6	6	US-10-857-435A-523	Sequence 523, App	785	15	30.6	9	6	US-10-997-201A-39	Sequence 39, Appl
713	15	30.6	6	7	US-11-032-773-186	Sequence 186, App	786	15	30.6	9	6	US-10-952-535A-44	Sequence 44, Appl
714	15	30.6	6	7	US-11-234-424-25	Sequence 25, Appl	787	15	30.6	9	6	US-10-491-096-8	Sequence 8, Appli
715	15	30.6	7	6	US-10-842-877A-39	Sequence 39, Appl	788	15	30.6	9	6	US-10-491-096-70	Sequence 70, Appl
716	15	30.6	7	6	US-10-467-033-4	Sequence 4, Appli	789	15	30.6	9	6	US-10-491-096-183	Sequence 183, App
717	15	30.6	7	6	US-10-467-033-10	Sequence 10, Appl	790	15	30.6	9	6	US-10-925-366A-21	Sequence 21, Appl
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719	15	30.6	7	6	US-10-467-033-20	Sequence 20, Appl	792	15	30.6	9	6	US-10-859-643-17	Sequence 17, Appl
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724	15	30.6	7	7	US-11-183-664-29	Sequence 29, Appl	797	15	30.6	9	6	US-10-859-643-140	Sequence 140, App
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726	15	30.6	7	7	US-11-225-686-3267	Sequence 3267, Ap	799	15	30.6	9	6	US-10-859-643-281	Sequence 281, App
727	15	30.6	7	7	US-11-225-686-3282	Sequence 3282, Ap	800	15	30.6	9	6	US-10-859-643-355	Sequence 355, App
728	15	30.6	7	7	US-11-202-009-3253	Sequence 3253, Ap	801	15	30.6	9	6	US-10-859-643-457	Sequence 457, App
729	15	30.6	7	7	US-11-202-009-3267	Sequence 3267, Ap	802	15	30.6	9	6	US-10-859-643-491	Sequence 491, App
730	15	30.6	7	7	US-11-202-009-3282	Sequence 3282, Ap	803	15	30.6	9	6	US-10-859-643-554	Sequence 554, App
731	15	30.6	7	7	US-11-129-741-1781	Sequence 1781, Ap	804	15	30.6	9	6	US-10-859-643-566	Sequence 566, App
732	15	30.6	7	7	US-11-129-741-1813	Sequence 1813, Ap	805	15	30.6	9	6	US-10-859-643-588	Sequence 588, App
733	15	30.6	7	7	US-11-247-423-229	Sequence 229, App	806	15	30.6	9	6	US-10-859-643-660	Sequence 660, App
734	15	30.6	8	6	US-10-989-226-69	Sequence 69, Appl	807	15	30.6	9	6	US-10-859-643-697	Sequence 663, App
735	15	30.6	8	6	US-10-989-226-77	Sequence 77, Appl	808	15	30.6	9	6	US-10-859-643-697	Sequence 697, App
736	15	30.6	8	6	US-10-989-226-81	Sequence 81, Appl	809	15	30.6	9	6	US-10-895-064-2776	Sequence 2776, Ap
737	15	30.6	8	6	US-10-842-877A-31	Sequence 31, Appl	810	15	30.6	9	6	US-10-989-767A-23	Sequence 23, Appl
738	15	30.6	8	6	US-10-622-246-69	Sequence 69, Appl	811	15	30.6	9	6	US-10-989-767A-37	Sequence 37, Appl
739	15	30.6	8	6	US-10-895-064-1881	Sequence 1881, Ap	812	15	30.6	9	6	US-10-989-767A-44	Sequence 44, Appl
740	15	30.6	8	7	US-11-045-024-463	Sequence 463, App	813	15	30.6	9	6	US-10-989-767A-313	Sequence 313, App
741	15	30.6	8	7	US-11-045-024-1697	Sequence 1697, App	814	15	30.6	9	6	US-10-989-767A-475	Sequence 475, App
742	15	30.6	8	7	US-11-045-024-1698	Sequence 1698, Ap	815	15	30.6	9	6	US-10-989-767A-577	Sequence 577, App
743	15	30.6	8	7	US-11-045-024-1730	Sequence 1730, Ap	816	15	30.6	9	6	US-10-989-767A-577	Sequence 577, App
744	15	30.6	8	7	US-11-045-024-2475	Sequence 2475, Ap	817	15	30.6	9	6	US-10-857-484-284	Sequence 284, App
745	15	30.6	8	7	US-11-045-024-3164	Sequence 3164, Ap	818	15	30.6	9	6	US-10-857-484-309	Sequence 309, App
746	15	30.6	8	7	US-11-045-024-3165	Sequence 3165, Ap	819	15	30.6	9	6	US-10-857-484-316	Sequence 316, App
747	15	30.6	8	7	US-11-045-024-4015	Sequence 4015, Ap	820	15	30.6	9	6	US-10-857-484-352	Sequence 352, App
748	15	30.6	8	7	US-11-045-024-4379	Sequence 4379, Ap	821	15	30.6	9	6	US-10-857-484-374	Sequence 374, App
749	15	30.6	8	7	US-11-045-024-4380	Sequence 4380, Ap	822	15	30.6	9	6	US-10-857-484-377	Sequence 377, App
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751	15	30.6	8	7	US-11-045-024-5173	Sequence 5173, Ap	824	15	30.6	9	6	US-10-857-484-906	Sequence 906, App
752	15	30.6	8	7	US-11-045-024-5175	Sequence 5175, Ap	825	15	30.6	9	6	US-10-857-484-910	Sequence 910, App
753	15	30.6	8	7	US-11-045-024-5305	Sequence 5305, Ap	826	15	30.6	9	6	US-10-857-484-916	Sequence 916, App
754	15	30.6	8	7	US-11-045-024-5306	Sequence 5306, Ap	827	15	30.6	9	6	US-10-857-484-919	Sequence 919, App
755	15	30.6	8	7	US-11-045-024-5415	Sequence 5415, Ap	828	15	30.6	9	6	US-10-857-484-950	Sequence 950, App

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831	15	30.6	9	6	US-10-857-484-1484	Sequence 1484, Ap	904	15	30.6	9	7	US-11-097-864-588	Sequence 588, App
832	15	30.6	9	6	US-10-857-484-1488	Sequence 1488, Ap	905	15	30.6	9	7	US-11-097-864-660	Sequence 660, App
833	15	30.6	9	6	US-10-857-484-1510	Sequence 1510, Ap	906	15	30.6	9	7	US-11-097-864-663	Sequence 663, App
834	15	30.6	9	6	US-10-857-484-1516	Sequence 1516, Ap	907	15	30.6	9	7	US-11-097-864-697	Sequence 697, App
835	15	30.6	9	6	US-10-857-484-1995	Sequence 1995, Ap	908	15	30.6	9	7	US-11-097-912-17	Sequence 17, Appl
836	15	30.6	9	6	US-10-857-484-2014	Sequence 2014, Ap	909	15	30.6	9	7	US-11-097-912-22	Sequence 22, Appl
837	15	30.6	9	6	US-10-857-484-2019	Sequence 2019, Ap	910	15	30.6	9	7	US-11-097-912-44	Sequence 44, Appl
838	15	30.6	9	6	US-10-857-484-2022	Sequence 2022, Ap	911	15	30.6	9	7	US-11-097-912-114	Sequence 114, Appl
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840	15	30.6	9	6	US-10-857-484-2042	Sequence 2042, Ap	913	15	30.6	9	7	US-11-097-912-140	Sequence 140, App
841	15	30.6	9	6	US-10-857-484-2561	Sequence 2561, Ap	914	15	30.6	9	7	US-11-097-912-272	Sequence 272, App
842	15	30.6	9	6	US-10-857-484-2591	Sequence 2591, Ap	915	15	30.6	9	7	US-11-097-912-281	Sequence 281, App
843	15	30.6	9	6	US-10-857-484-2601	Sequence 2601, Ap	916	15	30.6	9	7	US-11-097-912-355	Sequence 355, App
844	15	30.6	9	6	US-10-857-484-2604	Sequence 2604, Ap	917	15	30.6	9	7	US-11-097-912-457	Sequence 457, App
845	15	30.6	9	6	US-10-857-484-2623	Sequence 2623, Ap	918	15	30.6	9	7	US-11-097-912-491	Sequence 491, App
846	15	30.6	9	6	US-10-857-484-2624	Sequence 2624, Ap	919	15	30.6	9	7	US-11-097-912-554	Sequence 554, App
847	15	30.6	9	6	US-10-857-484-2630	Sequence 2630, Ap	920	15	30.6	9	7	US-11-097-912-566	Sequence 566, App
848	15	30.6	9	6	US-10-857-484-2641	Sequence 2641, Ap	921	15	30.6	9	7	US-11-097-912-588	Sequence 588, App
849	15	30.6	9	6	US-10-857-484-2643	Sequence 2643, Ap	922	15	30.6	9	7	US-11-097-912-660	Sequence 660, App
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851	15	30.6	9	6	US-10-857-484-3119	Sequence 3119, Ap	924	15	30.6	9	7	US-11-097-912-697	Sequence 697, App
852	15	30.6	9	6	US-10-857-484-3126	Sequence 3126, Ap	925	15	30.6	9	7	US-11-110-274-301	Sequence 301, App
853	15	30.6	9	6	US-10-857-484-3131	Sequence 3131, Ap	926	15	30.6	9	7	US-11-045-024-45	Sequence 45, Appl
854	15	30.6	9	6	US-10-857-484-3156	Sequence 3156, Ap	927	15	30.6	9	7	US-11-045-024-265	Sequence 265, App
855	15	30.6	9	6	US-10-857-484-3160	Sequence 3160, Ap	928	15	30.6	9	7	US-11-045-024-2486	Sequence 2486, App
856	15	30.6	9	6	US-10-857-484-3174	Sequence 3174, Ap	929	15	30.6	9	7	US-11-045-024-2488	Sequence 2488, App
857	15	30.6	9	6	US-10-857-484-3178	Sequence 3178, Ap	930	15	30.6	9	7	US-11-045-024-3241	Sequence 3241, App
858	15	30.6	9	6	US-10-857-484-3179	Sequence 3179, Ap	931	15	30.6	9	7	US-11-045-024-3248	Sequence 3248, App
859	15	30.6	9	6	US-10-857-484-3199	Sequence 3199, Ap	932	15	30.6	9	7	US-11-045-024-3249	Sequence 3249, App
860	15	30.6	9	6	US-10-857-484-3185	Sequence 3185, Ap	933	15	30.6	9	7	US-11-045-024-3465	Sequence 3465, App
861	15	30.6	9	6	US-10-857-484-3681	Sequence 3681, Ap	934	15	30.6	9	7	US-11-045-024-3769	Sequence 3769, App
862	15	30.6	9	6	US-10-857-484-3698	Sequence 3698, Ap	935	15	30.6	9	7	US-11-045-024-4503	Sequence 4503, App
863	15	30.6	9	6	US-10-857-484-3706	Sequence 3706, Ap	936	15	30.6	9	7	US-11-045-024-4522	Sequence 4522, App
864	15	30.6	9	6	US-10-857-484-3728	Sequence 3728, Ap	937	15	30.6	9	7	US-11-045-024-4523	Sequence 4523, App
865	15	30.6	9	6	US-10-857-484-3732	Sequence 3732, Ap	938	15	30.6	9	7	US-11-045-024-4887	Sequence 4887, App
866	15	30.6	9	6	US-10-857-484-4148	Sequence 4148, Ap	939	15	30.6	9	7	US-11-045-024-5123	Sequence 5123, App
867	15	30.6	9	6	US-10-857-484-4164	Sequence 4164, Ap	940	15	30.6	9	7	US-11-045-024-5201	Sequence 5201, App
868	15	30.6	9	6	US-10-857-484-4166	Sequence 4166, Ap	941	15	30.6	9	7	US-11-045-024-5203	Sequence 5203, App
869	15	30.6	9	6	US-10-857-484-4423	Sequence 4423, Ap	942	15	30.6	9	7	US-11-045-024-5204	Sequence 5204, App
870	15	30.6	9	6	US-10-857-484-4441	Sequence 4441, Ap	943	15	30.6	9	7	US-11-045-024-5336	Sequence 5336, App
871	15	30.6	9	6	US-10-857-484-4528	Sequence 4528, Ap	944	15	30.6	9	7	US-11-045-024-5443	Sequence 5443, App
872	15	30.6	9	6	US-10-857-484-4535	Sequence 4535, Ap	945	15	30.6	9	7	US-11-045-024-5983	Sequence 5983, App
873	15	30.6	9	6	US-10-857-484-4605	Sequence 4605, Ap	946	15	30.6	9	7	US-11-045-024-5985	Sequence 5985, App
874	15	30.6	9	6	US-10-857-484-4608	Sequence 4608, Ap	947	15	30.6	9	7	US-11-045-024-6790	Sequence 6790, App
875	15	30.6	9	6	US-10-857-484-4609	Sequence 4609, Ap	948	15	30.6	9	7	US-11-045-024-6821	Sequence 6821, App
876	15	30.6	9	6	US-10-857-484-4620	Sequence 4620, Ap	949	15	30.6	9	7	US-11-045-024-7020	Sequence 7020, App
877	15	30.6	9	6	US-10-857-484-4621	Sequence 4621, Ap	950	15	30.6	9	7	US-11-045-024-7067	Sequence 7067, App
878	15	30.6	9	6	US-10-857-484-4631	Sequence 4631, Ap	951	15	30.6	9	7	US-11-045-024-7923	Sequence 7923, App
879	15	30.6	9	6	US-10-857-484-4647	Sequence 4647, Ap	952	15	30.6	9	7	US-11-045-024-9816	Sequence 9816, App
880	15	30.6	9	6	US-10-857-484-4647	Sequence 4647, Ap	953	15	30.6	9	7	US-11-045-024-10024	Sequence 10024, App
881	15	30.6	9	6	US-10-857-484-4727	Sequence 4727, Ap	954	15	30.6	9	7	US-11-045-024-10213	Sequence 10213, App
882	15	30.6	9	6	US-10-857-484-4782	Sequence 4782, Ap	955	15	30.6	9	7	US-11-045-024-10389	Sequence 10389, App
883	15	30.6	9	6	US-10-857-484-4901	Sequence 4901, Ap	956	15	30.6	9	7	US-11-045-024-11783	Sequence 11783, App
884	15	30.6	9	6	US-10-857-484-4922	Sequence 4922, Ap	957	15	30.6	9	7	US-11-045-024-11931	Sequence 11931, App
885	15	30.6	9	6	US-10-857-484-4928	Sequence 4928, Ap	958	15	30.6	9	7	US-11-045-024-12084	Sequence 12084, App
886	15	30.6	9	6	US-10-857-484-5019	Sequence 5019, Ap	959	15	30.6	9	7	US-11-045-024-12084	Sequence 12084, App
887	15	30.6	9	6	US-10-857-484-5028	Sequence 5028, Ap	960	15	30.6	9	7	US-11-045-024-12221	Sequence 12221, App
888	15	30.6	9	6	US-10-857-484-5028	Sequence 5028, Ap	961	15	30.6	9	7	US-11-045-024-12727	Sequence 12727, App
889	15	30.6	9	6	US-11-019-894A-2	Sequence 2, Appl	962	15	30.6	9	7	US-11-045-024-12757	Sequence 12757, App
890	15	30.6	9	7	US-11-093-274-18	Sequence 18, Appl	963	15	30.6	9	7	US-11-045-024-13597	Sequence 13597, App
891	15	30.6	9	7	US-11-097-864-17	Sequence 17, Appl	964	15	30.6	9	7	US-11-045-024-13714	Sequence 13714, App
892	15	30.6	9	7	US-11-097-864-22	Sequence 22, Appl	965	15	30.6	9	7	US-11-045-024-13797	Sequence 13797, App
893	15	30.6	9	7	US-11-097-864-44	Sequence 44, Appl	966	15	30.6	9	7	US-11-045-024-13801	Sequence 13801, App
894	15	30.6	9	7	US-11-097-864-114	Sequence 114, Appl	967	15	30.6	9	7	US-11-045-024-13803	Sequence 13803, App
895	15	30.6	9	7	US-11-097-864-130	Sequence 130, Appl	968	15	30.6	9	7	US-11-045-024-13838	Sequence 13838, App
896	15	30.6	9	7	US-11-097-864-140	Sequence 140, Appl	969	15	30.6	9	7	US-11-045-024-13839	Sequence 13839, App
897	15	30.6	9	7	US-11-097-864-272	Sequence 272, Appl	970	15	30.6	9	7	US-11-045-024-13845	Sequence 13845, App
898	15	30.6	9	7	US-11-097-864-281	Sequence 281, Appl	971	15	30.6	9	7	US-11-045-024-13884	Sequence 13884, App
899	15	30.6	9	7	US-11-097-864-355	Sequence 355, Appl	972	15	30.6	9	7	US-11-045-024-13886	Sequence 13886, App
900	15	30.6	9	7	US-11-097-864-457	Sequence 457, Appl	973	15	30.6	9	7	US-11-045-024-13891	Sequence 13891, App
901	15	30.6	9	7	US-11-097-864-491	Sequence 491, Appl	974	15	30.6	9	7	US-11-045-024-13955	Sequence 13955, App

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975 15 30.6 9 7 US-11-045-024-14306 Sequence 14306, A
976 15 30.6 9 7 US-11-045-024-14378 Sequence 14378, A
977 15 30.6 9 7 US-11-146-854-22 Sequence 22, Appl
978 15 30.6 9 7 US-11-146-854-42 Sequence 42, Appl
979 15 30.6 9 7 US-11-146-854-51 Sequence 51, Appl
980 15 30.6 9 7 US-11-146-854-68 Sequence 68, Appl
981 15 30.6 9 7 US-11-026-403-20 Sequence 20, Appl
982 15 30.6 9 7 US-11-026-403-27 Sequence 27, Appl
983 15 30.6 9 7 US-11-033-039-615 Sequence 615, App
984 15 30.6 9 7 US-11-033-039-702 Sequence 702, App
985 15 30.6 9 7 US-11-033-039-831 Sequence 831, App
986 15 30.6 9 7 US-11-041-893-175 Sequence 175, App
987 15 30.6 9 7 US-11-043-788-482 Sequence 482, App
988 15 30.6 9 7 US-11-066-967-9 Sequence 9, Appl
989 15 30.6 9 7 US-11-066-967-10 Sequence 10, Appl
990 15 30.6 9 7 US-11-145-861-337 Sequence 337, App
991 15 30.6 9 7 US-11-018-868-71 Sequence 71, App
992 15 30.6 9 7 US-11-018-868-80 Sequence 80, Appl
993 15 30.6 9 7 US-11-129-741-2776 Sequence 2776, Ap
994 15 30.6 9 7 US-11-247-423-188 Sequence 188, App
995 15 30.6 9 7 US-11-247-423-193 Sequence 193, App
996 15 30.6 9 7 US-11-247-423-194 Sequence 194, App
997 15 30.6 9 7 US-11-247-423-265 Sequence 265, App
998 15 30.6 9 7 US-11-247-423-511 Sequence 511, App
999 14.5 29.6 9 7 US-11-045-024-10395 Sequence 10395, A
1000 14.5 29.6 9 7 US-11-045-024-12228 Sequence 12228, A
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ALIGNMENTS

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RESULT 1
US-10-401-386B-52
; Sequence 52, Application US/10401386B
; Publication No. US20050261213A1
; GENERAL INFORMATION:
; APPLICANT: Patrick Branigan
; APPLICANT: Theresa J Goletz
; APPLICANT: David M Knight
; APPLICANT: Stephen G McCarthy
; APPLICANT: Bernard J Scallan
; APPLICANT: Linda A Snyder
; TITLE OF INVENTION: Nucleic Acid Compositions and Methods
; TITLE OF INVENTION: for Use
; FILE REFERENCE: CEN 310CIP
; CURRENT APPLICATION NUMBER: US/10/401,386B
; CURRENT FILING DATE: 2003-03-28
; PRIOR APPLICATION NUMBER: 10/247,203
; PRIOR FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: 60/328,371
; PRIOR FILING DATE: 2001-10-10
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 52
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-401-386B-52
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Query Match 100.0%; Score 49; DB 6; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 STAPPVHV 9
DB 1 STAPPVHV 9
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RESULT 2
US-10-517-784-35
; Sequence 35, Application US/10517784
; Publication No. US2006003315A1
; GENERAL INFORMATION:
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; APPLICANT: CROSS, Gideon
; APPLICANT: MARGALIT, Alon
; TITLE OF INVENTION: MEMBRANE-ANCHORED BETA-2 MICROGLOBULIN COVALENTLY LINKED TO MHC (
; FILE REFERENCE: GAVISH-004 US
; CURRENT APPLICATION NUMBER: US/10/517,784
; CURRENT FILING DATE: 2004-12-13
; PRIOR APPLICATION NUMBER: US 60/388,273
; PRIOR FILING DATE: 2002-06-12
; PRIOR APPLICATION NUMBER: PCT/IL03/00501
; PRIOR FILING DATE: 2003-06-12
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 35
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic
US-10-517-784-35
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Query Match 100.0%; Score 49; DB 6; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 STAPPVHV 9
DB 1 STAPPVHV 9
```

```
RESULT 3
US-10-401-386B-56
; Sequence 56, Application US/10401386B
; Publication No. US20050261213A1
; GENERAL INFORMATION:
; APPLICANT: Patrick Branigan
; APPLICANT: Theresa J Goletz
; APPLICANT: David M Knight
; APPLICANT: Stephen G McCarthy
; APPLICANT: Bernard J Scallan
; APPLICANT: Linda A Snyder
; TITLE OF INVENTION: Nucleic Acid Compositions and Methods
; TITLE OF INVENTION: for Use
; FILE REFERENCE: CEN 310CIP
; CURRENT APPLICATION NUMBER: US/10/401,386B
; CURRENT FILING DATE: 2003-03-28
; PRIOR APPLICATION NUMBER: 10/247,203
; PRIOR FILING DATE: 2002-09-19
; PRIOR APPLICATION NUMBER: 60/328,371
; PRIOR FILING DATE: 2001-10-10
; NUMBER OF SEQ ID NOS: 81
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 56
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-401-386B-56
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Query Match 79.6%; Score 39; DB 6; Length 9;
Best Local Similarity 77.8%; Pred. No. 8.3e+04;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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```
QY 1 STAPPVHV 9
DB 1 STAPPVHV 9
```

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RESULT 4
US-11-045-024-6286
; Sequence 6286, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
```

```

; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6286
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6286

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Query Match 49.0%; Score 24; DB 7; Length 8;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy 2 TAPPVHN 8
Db 1 TAPPAES 7

```

```

RESULT 5
US-11-045-024-6385
; Sequence 6385, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04

```

```

; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6385
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6385

```

```

Query Match 49.0%; Score 24; DB 7; Length 8;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

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```

Qy 2 TAPPVHN 8
Db 1 TAPPAES 7

```

```

RESULT 6
US-11-045-024-8860
; Sequence 8860, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8860
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8860

```

```

Query Match 49.0%; Score 24; DB 7; Length 8;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;

```

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
 Db 1 TAPPAES 7

RESULT 7

US-11-045-024-9105
 ; Sequence 9105, Application US/11045024
 ; Publication No. US20050271676A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Sette, Alessandro
 ; APPLICANT: Sidney, John
 ; APPLICANT: Southwood, Scott
 ; APPLICANT: Livingston, Brian
 ; APPLICANT: Chesnut, Robert
 ; APPLICANT: Baker, Denise Marie
 ; APPLICANT: Celis, Esteban
 ; APPLICANT: Kubo, Ralph
 ; APPLICANT: Grey, Howard M.
 ; APPLICANT: Epimmune Inc.
 ; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
 ; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
 ; FILE REFERENCE: 2060.0040007
 ; CURRENT APPLICATION NUMBER: US/11/045,024
 ; CURRENT FILING DATE: 2005-01-28
 ; PRIOR APPLICATION NUMBER: US 09/412,863
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: US 08/027,146
 ; PRIOR FILING DATE: 1993-03-05
 ; PRIOR APPLICATION NUMBER: US 08/073,205
 ; PRIOR FILING DATE: 1993-06-04
 ; PRIOR APPLICATION NUMBER: US 08/103,396
 ; PRIOR FILING DATE: 1993-08-06
 ; PRIOR APPLICATION NUMBER: US 08/159,184
 ; PRIOR FILING DATE: 1993-11-29
 ; PRIOR APPLICATION NUMBER: US 08/159,339
 ; PRIOR FILING DATE: 1993-11-29
 ; PRIOR APPLICATION NUMBER: US 08/205,713
 ; PRIOR FILING DATE: 1994-03-04
 ; PRIOR APPLICATION NUMBER: US 08/347,610
 ; PRIOR FILING DATE: 1994-12-01
 ; NUMBER OF SEQ ID NOS: 14528
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 9105
 ; LENGTH: 8
 ; TYPE: PRT
 ; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

Query Match 49.0%; Score 24; DB 7; Length 8;
 Best Local Similarity 57.1%; Pred. No. 8.3e+04;
 Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
 Db 1 TAPPAES 7

RESULT 8

US-11-011-666-5
 ; Sequence 5, Application US/11011666
 ; Publication No. US20050244848A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Estell, David A.
 ; APPLICANT: Ganshaw, Grant C.
 ; APPLICANT: Paech, Christian
 ; APPLICANT: Paech, Sigrid
 ; TITLE OF INVENTION: Mass Spectrometric Analysis of
 ; TITLE OF INVENTION: Biopolymers
 ; FILE REFERENCE: GC626-2
 ; CURRENT APPLICATION NUMBER: US/11/011,666

; CURRENT FILING DATE: 2004-12-14
 ; PRIOR APPLICATION NUMBER: US 60/228,198
 ; PRIOR FILING DATE: 2000-08-25
 ; NUMBER OF SEQ ID NOS: 15
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 5
 ; LENGTH: 9
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: tryptic co-digest of 15N-subtilisin DAI and
 ; OTHER INFORMATION: subtilisin
 ; US-11-011-666-5

Query Match 49.0%; Score 24; DB 7; Length 9;
 Best Local Similarity 66.7%; Pred. No. 8.3e+04;
 Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 APPVHN 8
 Db 3 APAAHN 8

RESULT 9

US-11-045-024-146
 ; Sequence 146, Application US/11045024
 ; Publication No. US20050271676A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Sette, Alessandro
 ; APPLICANT: Sidney, John
 ; APPLICANT: Southwood, Scott
 ; APPLICANT: Livingston, Brian
 ; APPLICANT: Chesnut, Robert
 ; APPLICANT: Baker, Denise Marie
 ; APPLICANT: Celis, Esteban
 ; APPLICANT: Kubo, Ralph
 ; APPLICANT: Grey, Howard M.
 ; APPLICANT: Epimmune Inc.
 ; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
 ; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
 ; FILE REFERENCE: 2060.0040007
 ; CURRENT APPLICATION NUMBER: US/11/045,024
 ; CURRENT FILING DATE: 2005-01-28
 ; PRIOR APPLICATION NUMBER: US 09/412,863
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: US 08/027,146
 ; PRIOR FILING DATE: 1993-03-05
 ; PRIOR APPLICATION NUMBER: US 08/073,205
 ; PRIOR FILING DATE: 1993-06-04
 ; PRIOR APPLICATION NUMBER: US 08/103,396
 ; PRIOR FILING DATE: 1993-08-06
 ; PRIOR APPLICATION NUMBER: US 08/159,184
 ; PRIOR FILING DATE: 1993-11-29
 ; PRIOR APPLICATION NUMBER: US 08/159,339
 ; PRIOR FILING DATE: 1993-11-29
 ; PRIOR APPLICATION NUMBER: US 08/205,713
 ; PRIOR FILING DATE: 1994-03-04
 ; PRIOR APPLICATION NUMBER: US 08/347,610
 ; PRIOR FILING DATE: 1994-12-01
 ; NUMBER OF SEQ ID NOS: 14528
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 146
 ; LENGTH: 9
 ; TYPE: PRT
 ; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

Query Match 49.0%; Score 24; DB 7; Length 9;
 Best Local Similarity 57.1%; Pred. No. 8.3e+04;
 Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
 Db 1 TAPPAES 7

Db 2 TAPPAES 8

RESULT 10

US-11-045-024-148

; Sequence 148, Application US/11045024

; Publication No. US20050271676A1

; GENERAL INFORMATION:

; APPLICANT: Sette, Alessandro

; APPLICANT: Sidney, John

; APPLICANT: Southwood, Scott

; APPLICANT: Livingston, Brian

; APPLICANT: Chesnut, Robert

; APPLICANT: Baker, Denise Marie

; APPLICANT: Cellis, Esteban

; APPLICANT: Kubo, Ralph

; APPLICANT: Grey, Howard M.

; APPLICANT: Epimmune Inc.

; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency

; FILE REFERENCE: 2060.0040007

; CURRENT APPLICATION NUMBER: US/11/045,024

; CURRENT FILING DATE: 2005-01-28

; PRIOR APPLICATION NUMBER: US 09/412,863

; PRIOR FILING DATE: 1999-10-05

; PRIOR APPLICATION NUMBER: US 08/027,146

; PRIOR FILING DATE: 1993-03-05

; PRIOR APPLICATION NUMBER: US 08/073,205

; PRIOR FILING DATE: 1993-06-04

; PRIOR APPLICATION NUMBER: US 08/103,396

; PRIOR FILING DATE: 1993-08-06

; PRIOR APPLICATION NUMBER: US 08/159,184

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/159,339

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/205,713

; PRIOR FILING DATE: 1994-03-04

; PRIOR APPLICATION NUMBER: US 08/347,610

; PRIOR FILING DATE: 1994-12-01

; NUMBER OF SEQ ID NOS: 14528

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 148

; LENGTH: 9

; TYPE: PRT

; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

US-11-045-024-148

Query Match

Best Local Similarity 49.0%; Score 24; DB 7; Length 9;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPAES 8

|||||:

Db 2 TAPPAES 8

RESULT 11

US-11-045-024-2988

; Sequence 2988, Application US/11045024

; Publication No. US20050271676A1

; GENERAL INFORMATION:

; APPLICANT: Sette, Alessandro

; APPLICANT: Sidney, John

; APPLICANT: Southwood, Scott

; APPLICANT: Livingston, Brian

; APPLICANT: Chesnut, Robert

; APPLICANT: Baker, Denise Marie

; APPLICANT: Cellis, Esteban

; APPLICANT: Kubo, Ralph

; APPLICANT: Grey, Howard M.

; APPLICANT: Epimmune Inc.

; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency

; FILE REFERENCE: 2060.0040007

; CURRENT APPLICATION NUMBER: US/11/045,024

; CURRENT FILING DATE: 2005-01-28

; PRIOR APPLICATION NUMBER: US 09/412,863

; PRIOR FILING DATE: 1999-10-05

; PRIOR APPLICATION NUMBER: US 08/027,146

; PRIOR FILING DATE: 1993-03-05

; PRIOR APPLICATION NUMBER: US 08/073,205

; PRIOR FILING DATE: 1993-06-04

; PRIOR APPLICATION NUMBER: US 08/103,396

; PRIOR FILING DATE: 1993-08-06

; PRIOR APPLICATION NUMBER: US 08/159,184

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/159,339

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/205,713

; PRIOR FILING DATE: 1994-03-04

; PRIOR APPLICATION NUMBER: US 08/347,610

; PRIOR FILING DATE: 1994-12-01

; NUMBER OF SEQ ID NOS: 14528

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 148

; LENGTH: 9

; TYPE: PRT

; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

US-11-045-024-148

Query Match

Best Local Similarity 49.0%; Score 24; DB 7; Length 9;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPAES 8

|||||:

Db 2 TAPPAES 8

RESULT 12

US-11-045-024-4112

; Sequence 4112, Application US/11045024

; Publication No. US20050271676A1

; GENERAL INFORMATION:

; APPLICANT: Sette, Alessandro

; APPLICANT: Sidney, John

; APPLICANT: Southwood, Scott

; APPLICANT: Livingston, Brian

; APPLICANT: Chesnut, Robert

; APPLICANT: Baker, Denise Marie

; APPLICANT: Cellis, Esteban

; APPLICANT: Kubo, Ralph

; APPLICANT: Grey, Howard M.

; APPLICANT: Epimmune Inc.

; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency

; FILE REFERENCE: 2060.0040007

; CURRENT APPLICATION NUMBER: US/11/045,024

; CURRENT FILING DATE: 2005-01-28

; PRIOR APPLICATION NUMBER: US 09/412,863

; PRIOR FILING DATE: 1999-10-05

; PRIOR APPLICATION NUMBER: US 08/027,146

; PRIOR FILING DATE: 1993-03-05

; PRIOR APPLICATION NUMBER: US 08/073,205

; PRIOR FILING DATE: 1993-06-04

; PRIOR APPLICATION NUMBER: US 08/103,396

; PRIOR FILING DATE: 1993-08-06

; PRIOR APPLICATION NUMBER: US 08/159,184

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/159,339

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/205,713

; PRIOR FILING DATE: 1994-03-04

; PRIOR APPLICATION NUMBER: US 08/347,610

; PRIOR FILING DATE: 1994-12-01

; NUMBER OF SEQ ID NOS: 14528

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 148

; LENGTH: 9

; TYPE: PRT

; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

US-11-045-024-148

Query Match

Best Local Similarity 49.0%; Score 24; DB 7; Length 9;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPAES 8

|||||:

Db 2 TAPPAES 8

FILE REFERENCE: 2060.0040007

CURRENT APPLICATION NUMBER: US/11/045,024

CURRENT FILING DATE: 2005-01-28

PRIOR APPLICATION NUMBER: US 09/412,863

PRIOR FILING DATE: 1999-10-05

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/103,396

PRIOR FILING DATE: 1993-08-06

PRIOR APPLICATION NUMBER: US 08/159,184

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/159,339

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/205,713

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/347,610

PRIOR FILING DATE: 1994-12-01

NUMBER OF SEQ ID NOS: 14528

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 2988

LENGTH: 9

TYPE: PRT

ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

US-11-045-024-2988

Query Match

Best Local Similarity 49.0%; Score 24; DB 7; Length 9;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPAES 8

|||||:

Db 1 TAPPAES 7

RESULT 12

US-11-045-024-4112

; Sequence 4112, Application US/11045024

; Publication No. US20050271676A1

; GENERAL INFORMATION:

; APPLICANT: Sette, Alessandro

; APPLICANT: Sidney, John

; APPLICANT: Southwood, Scott

; APPLICANT: Livingston, Brian

; APPLICANT: Chesnut, Robert

; APPLICANT: Baker, Denise Marie

; APPLICANT: Cellis, Esteban

; APPLICANT: Kubo, Ralph

; APPLICANT: Grey, Howard M.

; APPLICANT: Epimmune Inc.

; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency

; FILE REFERENCE: 2060.0040007

; CURRENT APPLICATION NUMBER: US/11/045,024

; CURRENT FILING DATE: 2005-01-28

; PRIOR APPLICATION NUMBER: US 09/412,863

; PRIOR FILING DATE: 1999-10-05

; PRIOR APPLICATION NUMBER: US 08/027,146

; PRIOR FILING DATE: 1993-03-05

; PRIOR APPLICATION NUMBER: US 08/073,205

; PRIOR FILING DATE: 1993-06-04

; PRIOR APPLICATION NUMBER: US 08/103,396

; PRIOR FILING DATE: 1993-08-06

; PRIOR APPLICATION NUMBER: US 08/159,184

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/159,339

; PRIOR FILING DATE: 1993-11-29

; PRIOR APPLICATION NUMBER: US 08/205,713

; PRIOR FILING DATE: 1994-03-04

; PRIOR APPLICATION NUMBER: US 08/347,610

; PRIOR FILING DATE: 1994-12-01

; NUMBER OF SEQ ID NOS: 14528

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 2988

; LENGTH: 9

; TYPE: PRT

; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

US-11-045-024-2988

Query Match

Best Local Similarity 49.0%; Score 24; DB 7; Length 9;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPAES 8

|||||:

Db 1 TAPPAES 7

FILE REFERENCE: 2060.0040007

CURRENT APPLICATION NUMBER: US/11/045,024

CURRENT FILING DATE: 2005-01-28

PRIOR APPLICATION NUMBER: US 09/412,863

PRIOR FILING DATE: 1999-10-05

PRIOR APPLICATION NUMBER: US 08/027,146

PRIOR FILING DATE: 1993-03-05

PRIOR APPLICATION NUMBER: US 08/073,205

PRIOR FILING DATE: 1993-06-04

PRIOR APPLICATION NUMBER: US 08/103,396

PRIOR FILING DATE: 1993-08-06

PRIOR APPLICATION NUMBER: US 08/159,184

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/159,339

PRIOR FILING DATE: 1993-11-29

PRIOR APPLICATION NUMBER: US 08/205,713

PRIOR FILING DATE: 1994-03-04

PRIOR APPLICATION NUMBER: US 08/347,610

PRIOR FILING DATE: 1994-12-01

NUMBER OF SEQ ID NOS: 14528

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 2988

LENGTH: 9

TYPE: PRT

ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS

US-11-045-024-2988

Query Match

Best Local Similarity 49.0%; Score 24; DB 7; Length 9;

Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPAES 8

|||||:

Db 1 TAPPAES 7

FILE REFERENCE: 2060.004000

```
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4112
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-4112

Query Match      49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      2 TAPPVHN 8
DB      2 TAPPAES 8

RESULT 13
US-11-045-024-4114
; Sequence 4114, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Kubo, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5659
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-5659

Query Match      49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2 TAPPV 6
DB      5 TAPPL 9

RESULT 15
US-11-045-024-6287
; Sequence 6287, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; Publication No. US20050271676A1

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4114
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-4114

Query Match      49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY      2 TAPPVHN 8
DB      2 TAPPAES 8

RESULT 14
US-11-045-024-5659
; Sequence 5659, Application US/11045024
; Publication No. US20050271676A1
```


;; PRIOR APPLICATION NUMBER: US 08/073,205
;; PRIOR FILING DATE: 1993-06-04
;; PRIOR APPLICATION NUMBER: US 08/103,396
;; PRIOR FILING DATE: 1993-08-06
;; PRIOR APPLICATION NUMBER: US 08/159,184
;; PRIOR FILING DATE: 1993-11-29
;; PRIOR APPLICATION NUMBER: US 08/159,339
;; PRIOR FILING DATE: 1993-11-29
;; PRIOR APPLICATION NUMBER: US 08/205,713
;; PRIOR FILING DATE: 1994-03-04
;; PRIOR APPLICATION NUMBER: US 08/347,610
;; PRIOR FILING DATE: 1994-12-01
;; NUMBER OF SEQ ID NOS: 14528
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 6287
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6287

Query Match 49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
DB 2 TAPPAES 8

RESULT 16
US-11-045-024-6387
;; Sequence 6387, Application US/11045024
;; Publication No. US20050271676A1
;; GENERAL INFORMATION:
;; APPLICANT: Sette, Alessandro
;; APPLICANT: Sidney, John
;; APPLICANT: Southwood, Scott
;; APPLICANT: Livingston, Brian
;; APPLICANT: Chesnut, Robert
;; APPLICANT: Baker, Denise Marie
;; APPLICANT: Celis, Esteban
;; APPLICANT: Kubo, Ralph
;; APPLICANT: Grey, Howard M.
;; APPLICANT: Epimmune Inc.
;; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
;; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
;; FILE REFERENCE: 2060, 0040007
;; CURRENT APPLICATION NUMBER: US/11/045,024
;; CURRENT FILING DATE: 2005-01-28
;; PRIOR APPLICATION NUMBER: US 09/412,863
;; PRIOR FILING DATE: 1999-10-05
;; PRIOR APPLICATION NUMBER: US 08/027,146
;; PRIOR FILING DATE: 1993-03-05
;; PRIOR APPLICATION NUMBER: US 08/073,205
;; PRIOR FILING DATE: 1993-06-04
;; PRIOR APPLICATION NUMBER: US 08/103,396
;; PRIOR FILING DATE: 1993-08-06
;; PRIOR APPLICATION NUMBER: US 08/159,184
;; PRIOR FILING DATE: 1993-11-29
;; PRIOR APPLICATION NUMBER: US 08/205,713
;; PRIOR FILING DATE: 1994-03-04
;; PRIOR APPLICATION NUMBER: US 08/347,610
;; PRIOR FILING DATE: 1994-12-01
;; NUMBER OF SEQ ID NOS: 14528
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 6387
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6387

Query Match 49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
DB 2 TAPPAES 8

RESULT 17
US-11-045-024-8861
;; Sequence 8861, Application US/11045024
;; Publication No. US20050271676A1
;; GENERAL INFORMATION:
;; APPLICANT: Sette, Alessandro
;; APPLICANT: Sidney, John
;; APPLICANT: Southwood, Scott
;; APPLICANT: Livingston, Brian
;; APPLICANT: Chesnut, Robert
;; APPLICANT: Baker, Denise Marie
;; APPLICANT: Celis, Esteban
;; APPLICANT: Kubo, Ralph
;; APPLICANT: Grey, Howard M.
;; APPLICANT: Epimmune Inc.
;; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
;; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
;; FILE REFERENCE: 2060, 0040007
;; CURRENT APPLICATION NUMBER: US/11/045,024
;; CURRENT FILING DATE: 2005-01-28
;; PRIOR APPLICATION NUMBER: US 09/412,863
;; PRIOR FILING DATE: 1999-10-05
;; PRIOR APPLICATION NUMBER: US 08/027,146
;; PRIOR FILING DATE: 1993-03-05
;; PRIOR APPLICATION NUMBER: US 08/073,205
;; PRIOR FILING DATE: 1993-06-04
;; PRIOR APPLICATION NUMBER: US 08/103,396
;; PRIOR FILING DATE: 1993-08-06
;; PRIOR APPLICATION NUMBER: US 08/159,184
;; PRIOR FILING DATE: 1993-11-29
;; PRIOR APPLICATION NUMBER: US 08/205,713
;; PRIOR FILING DATE: 1994-03-04
;; PRIOR APPLICATION NUMBER: US 08/347,610
;; PRIOR FILING DATE: 1994-12-01
;; NUMBER OF SEQ ID NOS: 14528
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 8861
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8861

Query Match 49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
DB 2 TAPPAES 8

RESULT 18
US-11-045-024-8862
;; Sequence 8862, Application US/11045024
;; Publication No. US20050271676A1
;; GENERAL INFORMATION:
;; APPLICANT: Sette, Alessandro
;; APPLICANT: Sidney, John
;; APPLICANT: Southwood, Scott
;; APPLICANT: Livingston, Brian
;; APPLICANT: Chesnut, Robert
;; APPLICANT: Baker, Denise Marie

```

; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8862
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8862

Query Match 49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
DB 1 TAPPAES 7

RESULT 19
US-11-045-024-9107
; Sequence 9107, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8862
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8862

```

```

; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9107
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-9107

Query Match 49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
DB 2 TAPPAES 8

RESULT 20
US-11-045-024-11134
; Sequence 11134, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11134
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-11134

Query Match 49.0%; Score 24; DB 7; Length 9;
Best Local Similarity 57.1%; Pred. No. 8.3e+04;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2 TAPPVHN 8
DB 1 TAPPAES 7

```

RESULT 21
US-11-031-737A-40
; Sequence 40, Application US/11031737A
; Publication No. US20060019240A1
; GENERAL INFORMATION:
; APPLICANT: Alroy, Iris
; APPLICANT: Greener, Tsvika
; APPLICANT: Tuvia, Shmuel
; APPLICANT: Ben-Avraham, Danny
; TITLE OF INVENTION: POSH NUCLEIC ACIDS, POLYPEPTIDES AND RELATED METHODS
; FILE REFERENCE: PROL-P03-010
; CURRENT APPLICATION NUMBER: US/11/031,737A
; CURRENT FILING DATE: 2005-01-07
; PRIOR APPLICATION NUMBER: 10/293,965
; PRIOR FILING DATE: 2002-11-12
; PRIOR APPLICATION NUMBER: 60/345,846
; PRIOR FILING DATE: 2001-11-09
; PRIOR APPLICATION NUMBER: 60/364,530
; PRIOR FILING DATE: 2002-03-15
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 40
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: sequence motif
US-11-031-737A-40

Query Match 46.9%; Score 23; DB 7; Length 7;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
Db 2 TAPP 5

RESULT 22
US-11-031-482-40
; Sequence 40, Application US/11031482
; Publication No. US20060035213A1
; GENERAL INFORMATION:
; APPLICANT: Alroy, Iris
; APPLICANT: Greener, Tsvika
; APPLICANT: Tuvia, Shmuel
; APPLICANT: Ben-Avraham, Danny
; TITLE OF INVENTION: POSH NUCLEIC ACIDS, POLYPEPTIDES AND RELATED METHODS
; FILE REFERENCE: PROL-P02-010
; CURRENT APPLICATION NUMBER: US/11/031,482
; CURRENT FILING DATE: 2005-01-06
; PRIOR APPLICATION NUMBER: 10/293,965
; PRIOR FILING DATE: 2002-11-12
; PRIOR APPLICATION NUMBER: 60/345,846
; PRIOR FILING DATE: 2001-11-09
; PRIOR APPLICATION NUMBER: 60/364,530
; PRIOR FILING DATE: 2002-03-15
; NUMBER OF SEQ ID NOS: 48
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 40
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: sequence motif
US-11-031-482-40

Query Match 46.9%; Score 23; DB 7; Length 7;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
Db 2 TAPP 5

RESULT 23
US-11-045-024-5300
; Sequence 5300, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5300
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-5300

Query Match 46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHNV 9
Db 2 PVHGV 6

RESULT 24
US-11-045-024-6267
; Sequence 6267, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epiimmune Inc.
US-11-045-024-6267

```
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6267
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6267

Query Match          46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 TAPP 5
DB      1 TAPP 4

RESULT 25
US-11-045-024-6353
; Sequence 6353, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6353
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6353

Query Match          46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 TAPP 5
DB      1 TAPP 4

RESULT 26
US-11-045-024-7822
; Sequence 7822, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7822
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-7822

Query Match          46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5 PVHNV 9
DB      2 PVHGV 6

RESULT 27
US-11-045-024-8826
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; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6353
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6353

Query Match          46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2 TAPP 5
DB      1 TAPP 4

RESULT 26
US-11-045-024-7822
; Sequence 7822, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7822
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-7822

Query Match          46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      5 PVHNV 9
DB      2 PVHGV 6

RESULT 27
US-11-045-024-8826
```

; Sequence 8826, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8826
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8826

Query Match 46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
|||
Db 1 TAPP 4

RESULT 28
US-11-045-024-9004
; Sequence 9004, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05

; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9004
; LENGTH: 8
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-9004

Query Match 46.9%; Score 23; DB 7; Length 8;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
|||
Db 1 TAPP 4

RESULT 29
US-10-510-101-57
; Sequence 57, Application US/10510101
; Publication No. US20060018915A1
; GENERAL INFORMATION:
; APPLICANT: Epimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510,101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 57
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Human Immunodeficiency Virus
US-10-510-101-57

Query Match 46.9%; Score 23; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHNV 9
|||
Db 5 PVHGV 9

RESULT 30
US-10-510-101-58
; Sequence 58, Application US/10510101
; Publication No. US20060018915A1
; GENERAL INFORMATION:

; APPLICANT: Epimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510,101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 58
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Human Immunodeficiency Virus
US-10-510-101-58

Query Match 46.9%; Score 23; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04; Indels 1; Gaps 0;
Matches 4; Conservative 0; Mismatches 1; Indels 1; Gaps 0;
QY 5 PVHNV 9
Db 5 PVHGV 9

RESULT 31
US-10-510-101-59
; Sequence 59, Application US/10510101
; Publication No. US20060018915A1
; GENERAL INFORMATION:
; APPLICANT: Epimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510,101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 59
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Human Immunodeficiency Virus
US-10-510-101-59

Query Match 46.9%; Score 23; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04; Indels 1; Gaps 0;
Matches 4; Conservative 0; Mismatches 1; Indels 1; Gaps 0;
QY 5 PVHNV 9
Db 5 PVHGV 9

RESULT 32
US-10-510-101-67
; Sequence 67, Application US/10510101
; Publication No. US20060018915A1

; GENERAL INFORMATION:
; APPLICANT: Epimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510,101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 67
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Human Immunodeficiency Virus
US-10-510-101-67

Query Match 46.9%; Score 23; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04; Indels 1; Gaps 0;
Matches 4; Conservative 0; Mismatches 1; Indels 1; Gaps 0;
QY 5 PVHNV 9
Db 5 PVHGV 9

RESULT 33
US-10-510-101-83
; Sequence 83, Application US/10510101
; Publication No. US20060018915A1
; GENERAL INFORMATION:
; APPLICANT: Epimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510,101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 83
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Homo sapiens melanoma antigens
US-10-510-101-83

Query Match 46.9%; Score 23; DB 6; Length 9;
Best Local Similarity 75.0%; Pred. No. 8.3e+04; Indels 0; Gaps 0;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 4 PPVH 7
Db 4 PPLH 7

RESULT 34
US-10-510-101-175
; Sequence 175, Application US/10510101

; Publication No. US20060018915A1
; GENERAL INFORMATION:
; APPLICANT: Epimmune Inc.
; APPLICANT: Ishioka, Glenn
; APPLICANT: Fikes, John
; APPLICANT: Tangri, Shabnam
; APPLICANT: Sette, Alessandro
; TITLE OF INVENTION: Heteroclitic Analogs and Related Methods
; FILE REFERENCE: 2060.009PC05
; CURRENT APPLICATION NUMBER: US/10/510,101
; CURRENT FILING DATE: 2004-10-05
; PRIOR APPLICATION NUMBER: US 60/413,471
; PRIOR FILING DATE: 2002-09-26
; PRIOR APPLICATION NUMBER: US 10/116,118
; PRIOR FILING DATE: 2002-04-05
; NUMBER OF SEQ ID NOS: 196
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 175
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide derived from Homo sapiens melanoma antigens
US-10-510-101-175

Query Match 46.9%; Score 23; DB 6; Length 9;
Best Local Similarity 75.0%; Pred. No. 8.3e+04;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 4 PPVH 7
Db 4 PPLH 7

RESULT 35
US-11-045-024-147
; Sequence 147, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 147
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-149

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
Db 2 TAPP 5

RESULT 37
US-11-045-024-1247
; Sequence 1247, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro

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; APPLICANT: Sidney,John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1247
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-1247

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
DB 5 TAPP 8

RESULT 38
US-11-045-024-1885
; Sequence 1885, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Kubo, Esteban
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1247
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-1247

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; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1885
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-1885

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PVHGV 9

RESULT 39
US-11-045-024-2987
; Sequence 2987, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2987
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-2987

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
DB 5 TAPP 8

RESULT 38
US-11-045-024-1885
; Sequence 1885, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Kubo, Esteban
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1885
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-1885

```


;; PRIOR FILING DATE: 1994-03-04
;; PRIOR APPLICATION NUMBER: US 08/347,610
;; PRIOR FILING DATE: 1994-12-01
;; NUMBER OF SEQ ID NOS: 14528
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 4115
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-4115

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
Db 2 TAPP 5

RESULT 43
US-11-045-024-5192
; Sequence 5192, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5192
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-5192

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
Db 5 TAPP 8

RESULT 44
US-11-045-024-5195
; Sequence 5195, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5195
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-5195

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
Db 5 TAPP 8

RESULT 45
US-11-045-024-5845
; Sequence 5845, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28

```

; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5845
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-5845

```

```

Query Match      46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 80.0%; Pred. NO. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 5 PVHNV 9
Db 4 PVHGV 8

```

RESULT 46

```

US-11-045-024-6269
; Sequence 6269, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Cellis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; PRIOR FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6269
; LENGTH: 9

```

```

; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-6269

```

```

Query Match      46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. NO. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 2 TAPP 5
Db 2 TAPP 5

```

RESULT 47

```

US-11-045-024-6358
; Sequence 6358, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Cellis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; PRIOR FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6358
; LENGTH: 9

```

RESULT 48

```

US-11-045-024-7824
; Sequence 7824, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney John

```

```

Query Match      46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. NO. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 2 TAPP 5
Db 2 TAPP 5

```

```

; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/027,146
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-06-04
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7824
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-7824

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
Db 5 PVHGV 9

RESULT 49
US-11-045-024-8253
; Sequence 8253, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7824
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-7824

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
Db 5 PVHGV 9

RESULT 49
US-11-045-024-8253
; Sequence 8253, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8253
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8253

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 80.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
Db 4 PVHGV 8

RESULT 50
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; Sequence 8830, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert
; APPLICANT: Baker, Denise Marie
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph
; APPLICANT: Grey, Howard M.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
; TITLE OF INVENTION: Virus-1 Using Peptide and Nucleic Acid Compositions
; FILE REFERENCE: 2060.0040007
; CURRENT APPLICATION NUMBER: US/11/045,024
; CURRENT FILING DATE: 2005-01-28
; PRIOR APPLICATION NUMBER: US 09/412,863
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 08/073,205
; PRIOR FILING DATE: 1993-03-05
; PRIOR APPLICATION NUMBER: US 08/103,396
; PRIOR FILING DATE: 1993-08-06
; PRIOR APPLICATION NUMBER: US 08/159,184
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/159,339
; PRIOR FILING DATE: 1993-11-29
; PRIOR APPLICATION NUMBER: US 08/205,713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/347,610
; PRIOR FILING DATE: 1994-12-01
; NUMBER OF SEQ ID NOS: 14528
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8830
; LENGTH: 9
; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-8830

Query Match 46.9%; Score 23; DB 7; Length 9;
Best Local Similarity 100.0%; Pred. No. 8.3e+04;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 2 TAPP 5

Search completed: February 24, 2006, 10:32:45
Job time : 23 secs

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GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: February 24, 2006, 10:29:20 ; Search time 161 Seconds
(without alignments)
23.357 Million cell updates/sec

Title: US-10-019-513-1
Perfect score: 49
Sequence: 1 STAPPVHV 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 180914

Minimum DB seq length: 0
Maximum DB seq length: 9

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published Applications AA Main:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	39	79.6	9	4	US-10-447-161-97
5	39	79.6	9	4	US-10-296-317-44
6	39	79.6	9	5	US-10-758-970-55
7	39	79.6	9	5	US-10-751-845-9
8	37	75.5	8	5	US-10-973-927-19
9	32	65.3	8	3	US-09-994-466-10
10	31.5	64.3	8	4	US-10-080-013-20
11	31.5	64.3	8	4	US-10-289-566-20
12	31	63.3	9	6	US-09-994-466-7
13	31	63.3	9	6	US-11-055-119-3
14	28	57.1	9	4	US-10-334-726-100
15	27	55.1	9	3	US-09-077-214-28
16	27	55.1	9	6	US-11-055-119-9
17	26	53.1	8	5	US-10-473-137-175
18	25	51.0	9	3	US-09-879-936-22
19	25	51.0	9	4	US-10-001-546-67
20	25	51.0	9	4	US-10-182-252A-170
21	25	51.0	9	4	US-10-182-252A-172
22	25	51.0	9	4	US-10-611-440-14
23	24	49.0	7	3	US-09-954-385-198
24	24	49.0	7	5	US-10-912-512-158
25	24	49.0	7	5	US-10-235-043-198
26	24	49.0	8	4	US-10-786-850-33
27	24	49.0	8	6	US-11-051-411-80

28	24	49.0	8	6	US-11-051-411-107	Sequence 107, App
29	24	49.0	8	6	US-11-051-411-287	Sequence 287, App
30	24	49.0	8	6	US-11-051-411-496	Sequence 496, App
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32	24	49.0	8	6	US-11-051-411-887	Sequence 887, App
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34	24	49.0	9	3	US-09-833-203-38	Sequence 38, Appli
35	24	49.0	9	4	US-10-809-790-7	Sequence 7, Appli
36	24	49.0	9	5	US-10-862-195-1350	Sequence 1350, Ap
37	24	49.0	9	6	US-11-051-411-81	Sequence 81, Appl
38	24	49.0	9	6	US-11-051-411-219	Sequence 219, App
39	24	49.0	9	6	US-11-051-411-288	Sequence 288, App
40	24	49.0	9	6	US-11-051-411-368	Sequence 368, App
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43	24	49.0	9	6	US-11-051-411-733	Sequence 733, App
44	24	49.0	9	6	US-11-051-411-817	Sequence 817, App
45	24	49.0	9	6	US-11-051-411-939	Sequence 939, App
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47	23	46.9	5	3	US-09-972-035A-9	Sequence 9, Appli
48	23	46.9	5	4	US-10-223-172A-9	Sequence 9, Appli
49	23	46.9	5	4	US-10-224-999A-9	Sequence 9, Appli
50	23	46.9	5	4	US-10-663-407-9	Sequence 9, Appli
51	23	46.9	6	3	US-09-972-035A-11	Sequence 11, Appl
52	23	46.9	6	3	US-09-978-244A-67	Sequence 67, Appl
53	23	46.9	6	4	US-10-223-172A-11	Sequence 11, Appl
54	23	46.9	6	4	US-10-224-999A-11	Sequence 11, Appl
55	23	46.9	6	4	US-10-663-407-11	Sequence 11, Appl
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58	23	46.9	7	3	US-09-972-035A-17	Sequence 17, Appl
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61	23	46.9	7	4	US-10-097-534-67	Sequence 67, Appl
62	23	46.9	7	4	US-10-097-534-68	Sequence 68, Appl
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65	23	46.9	7	4	US-10-299-991-6	Sequence 6, Appli
66	23	46.9	7	4	US-10-299-991-7	Sequence 7, Appli
67	23	46.9	7	4	US-10-663-407-17	Sequence 17, Appl
68	23	46.9	7	5	US-10-935-642-81	Sequence 81, Appl
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71	23	46.9	7	6	US-11-115-682-159	Sequence 159, App
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73	23	46.9	8	3	US-09-117-380B-13	Sequence 13, Appl
74	23	46.9	8	3	US-09-117-380B-20	Sequence 20, Appl
75	23	46.9	8	3	US-09-972-035A-19	Sequence 19, Appl
76	23	46.9	8	3	US-09-972-035A-21	Sequence 21, Appl
77	23	46.9	8	4	US-10-185-815-76	Sequence 76, Appl
78	23	46.9	8	4	US-10-133-210-199	Sequence 199, App
79	23	46.9	8	4	US-10-226-007-65	Sequence 65, Appl
80	23	46.9	8	4	US-10-226-007-78	Sequence 78, Appl
81	23	46.9	8	4	US-10-226-007-91	Sequence 91, Appl
82	23	46.9	8	4	US-10-223-172A-19	Sequence 19, Appl
83	23	46.9	8	4	US-10-223-172A-21	Sequence 21, Appl
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86	23	46.9	8	4	US-10-224-999A-39	Sequence 39, Appl
87	23	46.9	8	4	US-10-224-999A-40	Sequence 40, Appl
88	23	46.9	8	4	US-10-224-999A-41	Sequence 41, Appl
89	23	46.9	8	4	US-10-224-999A-42	Sequence 42, Appl
90	23	46.9	8	4	US-10-224-999A-127	Sequence 127, App
91	23	46.9	8	4	US-10-224-999A-128	Sequence 128, App
92	23	46.9	8	4	US-10-224-999A-129	Sequence 129, App
93	23	46.9	8	4	US-10-224-999A-130	Sequence 130, App
94	23	46.9	8	4	US-10-224-999A-269	Sequence 269, App
95	23	46.9	8	4	US-10-224-999A-270	Sequence 270, App
96	23	46.9	8	4	US-10-224-999A-556	Sequence 556, App
97	23	46.9	8	4	US-10-224-999A-557	Sequence 557, App
98	23	46.9	8	4	US-10-224-999A-558	Sequence 558, App
99	23	46.9	8	4	US-10-224-999A-559	Sequence 559, App
100	23	46.9	8	4	US-10-239-313A-173	Sequence 173, App

101	23	46.9	8	4	US-10-116-275-89	Sequence 89, Appl	174	23	46.9	9	4	US-10-223-172A-22	Sequence 22, Appl
102	23	46.9	8	4	US-10-149-135-762	Sequence 762, App	175	23	46.9	9	4	US-10-223-172A-23	Sequence 23, Appl
103	23	46.9	8	4	US-10-149-135-802	Sequence 802, App	176	23	46.9	9	4	US-10-223-172A-25	Sequence 25, Appl
104	23	46.9	8	4	US-10-149-135-811	Sequence 811, App	177	23	46.9	9	4	US-10-223-172A-26	Sequence 26, Appl
105	23	46.9	8	4	US-10-149-135-841	Sequence 841, App	178	23	46.9	9	4	US-10-079-167-61	Sequence 61, Appl
106	23	46.9	8	4	US-10-149-135-849	Sequence 849, App	179	23	46.9	9	4	US-10-266-463A-42	Sequence 42, Appl
107	23	46.9	8	4	US-10-149-135-1283	Sequence 1283, Ap	180	23	46.9	9	4	US-10-266-463A-48	Sequence 48, Appl
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109	23	46.9	8	4	US-10-149-135-1562	Sequence 1562, Ap	182	23	46.9	9	4	US-10-116-118-19	Sequence 19, Appl
110	23	46.9	8	4	US-10-149-135-1706	Sequence 1706, Ap	183	23	46.9	9	4	US-10-116-118-20	Sequence 20, Appl
111	23	46.9	8	4	US-10-149-135-1806	Sequence 1806, Ap	184	23	46.9	9	4	US-10-283-847-15	Sequence 15, Appl
112	23	46.9	8	4	US-10-149-135-1908	Sequence 1908, Ap	185	23	46.9	9	4	US-10-224-999A-22	Sequence 22, Appl
113	23	46.9	8	4	US-10-149-135-2252	Sequence 2252, Ap	186	23	46.9	9	4	US-10-224-999A-23	Sequence 23, Appl
114	23	46.9	8	4	US-10-663-407-19	Sequence 19, Appl	187	23	46.9	9	4	US-10-224-999A-25	Sequence 25, Appl
115	23	46.9	8	4	US-10-663-407-21	Sequence 21, Appl	188	23	46.9	9	4	US-10-224-999A-26	Sequence 26, Appl
116	23	46.9	8	4	US-10-657-022-337	Sequence 337, App	189	23	46.9	9	4	US-10-224-999A-44	Sequence 44, Appl
117	23	46.9	8	4	US-10-657-022-346	Sequence 346, App	190	23	46.9	9	4	US-10-224-999A-45	Sequence 45, Appl
118	23	46.9	8	4	US-10-657-022-348	Sequence 348, App	191	23	46.9	9	4	US-10-224-999A-46	Sequence 46, Appl
119	23	46.9	8	6	US-11-147-083-76	Sequence 76, Appl	192	23	46.9	9	4	US-10-224-999A-47	Sequence 47, Appl
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122	23	46.9	9	2	US-08-344-824-149	Sequence 149, App	195	23	46.9	9	4	US-10-224-999A-133	Sequence 133, App
123	23	46.9	9	2	US-08-344-824-156	Sequence 156, App	196	23	46.9	9	4	US-10-224-999A-134	Sequence 134, App
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126	23	46.9	9	3	US-09-894-018-6	Sequence 6, Appli	199	23	46.9	9	4	US-10-224-999A-274	Sequence 274, App
127	23	46.9	9	3	US-09-894-018-71	Sequence 71, Appl	200	23	46.9	9	4	US-10-224-999A-275	Sequence 275, App
128	23	46.9	9	3	US-09-894-018-148	Sequence 148, App	201	23	46.9	9	4	US-10-224-999A-276	Sequence 276, App
129	23	46.9	9	3	US-09-912-787-81	Sequence 81, Appl	202	23	46.9	9	4	US-10-224-999A-561	Sequence 561, App
130	23	46.9	9	3	US-09-117-380B-10	Sequence 10, Appl	203	23	46.9	9	4	US-10-224-999A-562	Sequence 562, App
131	23	46.9	9	3	US-09-117-380B-14	Sequence 14, Appl	204	23	46.9	9	4	US-10-224-999A-563	Sequence 563, App
132	23	46.9	9	3	US-09-117-380B-18	Sequence 18, Appl	205	23	46.9	9	4	US-10-224-999A-564	Sequence 564, App
133	23	46.9	9	3	US-09-972-035A-22	Sequence 22, Appl	206	23	46.9	9	4	US-10-224-999A-565	Sequence 565, App
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135	23	46.9	9	3	US-09-277-074-5	Sequence 5, Appli	208	23	46.9	9	4	US-10-200-708-10	Sequence 10, Appl
136	23	46.9	9	3	US-09-277-064-5	Sequence 5, Appli	209	23	46.9	9	4	US-10-200-708-652	Sequence 652, App
137	23	46.9	9	3	US-09-938-864-176	Sequence 176, App	210	23	46.9	9	4	US-10-195-835-176	Sequence 176, App
138	23	46.9	9	3	US-09-938-864-218	Sequence 218, App	211	23	46.9	9	4	US-10-195-835-218	Sequence 218, App
139	23	46.9	9	3	US-09-938-864-292	Sequence 292, App	212	23	46.9	9	4	US-10-195-835-292	Sequence 292, App
140	23	46.9	9	3	US-09-791-477-176	Sequence 176, App	213	23	46.9	9	4	US-10-371-525-101	Sequence 101, App
141	23	46.9	9	3	US-09-791-477-218	Sequence 218, App	214	23	46.9	9	4	US-10-334-726-230	Sequence 230, App
142	23	46.9	9	3	US-09-791-477-292	Sequence 292, App	215	23	46.9	9	4	US-10-286-333-176	Sequence 176, App
143	23	46.9	9	3	US-09-785-019-176	Sequence 176, App	216	23	46.9	9	4	US-10-286-333-218	Sequence 218, App
144	23	46.9	9	3	US-09-785-019-218	Sequence 218, App	217	23	46.9	9	4	US-10-286-333-292	Sequence 292, App
145	23	46.9	9	3	US-09-785-019-292	Sequence 292, App	218	23	46.9	9	4	US-10-371-069-101	Sequence 101, App
146	23	46.9	9	3	US-09-788-110A-7	Sequence 7, Appli	219	23	46.9	9	4	US-10-371-645-101	Sequence 101, App
147	23	46.9	9	4	US-10-014-326-83	Sequence 83, Appl	220	23	46.9	9	4	US-10-371-260-101	Sequence 101, App
148	23	46.9	9	4	US-10-106-487-23	Sequence 23, Appl	221	23	46.9	9	4	US-10-244-830-176	Sequence 176, App
149	23	46.9	9	4	US-10-106-487-32	Sequence 32, Appl	222	23	46.9	9	4	US-10-244-830-218	Sequence 218, App
150	23	46.9	9	4	US-10-125-635A-176	Sequence 176, App	223	23	46.9	9	4	US-10-244-830-292	Sequence 292, App
151	23	46.9	9	4	US-10-125-635A-218	Sequence 218, App	224	23	46.9	9	4	US-10-353-678-23	Sequence 23, Appl
152	23	46.9	9	4	US-10-125-635A-292	Sequence 292, App	225	23	46.9	9	4	US-10-427-717-176	Sequence 176, App
153	23	46.9	9	4	US-10-105-200A-42	Sequence 42, Appl	226	23	46.9	9	4	US-10-427-717-218	Sequence 218, App
154	23	46.9	9	4	US-10-214-524-18	Sequence 18, Appl	227	23	46.9	9	4	US-10-427-717-292	Sequence 292, App
155	23	46.9	9	4	US-10-105-504A-42	Sequence 42, Appl	228	23	46.9	9	4	US-10-448-521-44	Sequence 44, Appl
156	23	46.9	9	4	US-10-105-678A-42	Sequence 42, Appl	229	23	46.9	9	4	US-10-388-337-23	Sequence 23, Appl
157	23	46.9	9	4	US-10-002-603-176	Sequence 176, App	230	23	46.9	9	4	US-10-388-104-36	Sequence 36, Appl
158	23	46.9	9	4	US-10-002-603-218	Sequence 218, App	231	23	46.9	9	4	US-10-149-135-54	Sequence 54, Appl
159	23	46.9	9	4	US-10-002-603-292	Sequence 292, App	232	23	46.9	9	4	US-10-149-135-475	Sequence 475, App
160	23	46.9	9	4	US-10-128-711-5	Sequence 5, Appli	233	23	46.9	9	4	US-10-149-135-812	Sequence 812, App
161	23	46.9	9	4	US-10-128-711-76	Sequence 76, Appl	234	23	46.9	9	4	US-10-149-135-850	Sequence 850, App
162	23	46.9	9	4	US-10-114-823B-23	Sequence 23, Appl	235	23	46.9	9	4	US-10-149-135-1028	Sequence 1028, Ap
163	23	46.9	9	4	US-10-133-210-3	Sequence 3, Appli	236	23	46.9	9	4	US-10-149-135-1400	Sequence 1400, Ap
164	23	46.9	9	4	US-10-133-210-27	Sequence 27, Appl	237	23	46.9	9	4	US-10-149-135-1713	Sequence 1713, Ap
165	23	46.9	9	4	US-10-133-210-220	Sequence 220, App	238	23	46.9	9	4	US-10-149-135-2051	Sequence 2051, Ap
166	23	46.9	9	4	US-10-133-210-235	Sequence 235, App	239	23	46.9	9	4	US-10-149-135-2115	Sequence 2115, Ap
167	23	46.9	9	4	US-10-226-007-66	Sequence 66, Appl	240	23	46.9	9	4	US-10-149-135-2248	Sequence 2248, Ap
168	23	46.9	9	4	US-10-226-007-79	Sequence 79, Appl	241	23	46.9	9	4	US-10-149-135-2249	Sequence 2249, Ap
169	23	46.9	9	4	US-10-226-007-92	Sequence 92, Appl	242	23	46.9	9	4	US-10-367-580-119	Sequence 119, App
170	23	46.9	9	4	US-10-226-007-104	Sequence 104, App	243	23	46.9	9	4	US-10-367-593-119	Sequence 119, App
171	23	46.9	9	4	US-10-168-843A-21	Sequence 21, Appl	244	23	46.9	9	4	US-10-367-594-119	Sequence 119, App
172	23	46.9	9	4	US-10-219-850-17	Sequence 17, Appl	245	23	46.9	9	4	US-10-367-654-119	Sequence 119, App
173	23	46.9	9	4	US-10-147-910-7	Sequence 7, Appli	246	23	46.9	9	4	US-10-367-658-119	Sequence 119, App

247	23	46.9	9	4	US-10-367-668-119	Sequence 119, App	320	22	44.9	7	4	US-10-609-217-296	Sequence 296, App
248	23	46.9	9	4	US-10-182-252A-64	Sequence 64, App1	321	22	44.9	7	4	US-10-632-388-396	Sequence 296, App
249	23	46.9	9	4	US-10-182-252A-65	Sequence 65, App1	322	22	44.9	7	4	US-10-651-723-296	Sequence 296, App
250	23	46.9	9	4	US-10-182-252A-66	Sequence 66, App1	323	22	44.9	7	4	US-10-645-761-296	Sequence 296, App
251	23	46.9	9	4	US-10-182-252A-68	Sequence 68, App1	324	22	44.9	7	4	US-10-666-696-296	Sequence 296, App
252	23	46.9	9	4	US-10-182-252A-69	Sequence 69, App1	325	22	44.9	7	4	US-10-653-048-296	Sequence 296, App
253	23	46.9	9	4	US-10-182-252A-71	Sequence 71, App1	326	22	44.9	7	4	US-10-807-856-203	Sequence 203, App
254	23	46.9	9	4	US-10-182-252A-74	Sequence 74, App1	327	22	44.9	7	5	US-10-645-784-296	Sequence 296, App
255	23	46.9	9	4	US-10-182-252A-77	Sequence 77, App1	328	22	44.9	7	5	US-10-952-557-280	Sequence 280, App
256	23	46.9	9	4	US-10-182-252A-78	Sequence 78, App1	329	22	44.9	8	4	US-10-149-138-583	Sequence 583, App
257	23	46.9	9	4	US-10-182-252A-80	Sequence 80, App1	330	22	44.9	8	4	US-10-149-138-1472	Sequence 1472, App
258	23	46.9	9	4	US-10-182-252A-81	Sequence 81, App1	331	22	44.9	8	4	US-10-149-138-2028	Sequence 2028, App
259	23	46.9	9	4	US-10-182-252A-1375	Sequence 1375, App	332	22	44.9	8	4	US-10-149-138-583	Sequence 583, App
260	23	46.9	9	4	US-10-182-252A-1388	Sequence 1388, App	333	22	44.9	8	4	US-10-149-138-1472	Sequence 1472, App
261	23	46.9	9	4	US-10-333-430-40	Sequence 40, App1	334	22	44.9	8	4	US-10-149-138-2028	Sequence 2028, App
262	23	46.9	9	4	US-10-333-430-45	Sequence 45, App1	335	22	44.9	8	5	US-10-862-195-422	Sequence 422, App
263	23	46.9	9	4	US-10-663-407-22	Sequence 22, App1	336	22	44.9	8	6	US-11-051-411-41	Sequence 41, App1
264	23	46.9	9	4	US-10-663-407-23	Sequence 23, App1	337	22	44.9	8	6	US-11-051-411-236	Sequence 236, App
265	23	46.9	9	4	US-10-648-780-176	Sequence 176, App	338	22	44.9	8	6	US-11-051-411-390	Sequence 390, App
266	23	46.9	9	4	US-10-648-780-218	Sequence 218, App	339	22	44.9	8	6	US-11-051-411-578	Sequence 578, App
267	23	46.9	9	4	US-10-648-780-292	Sequence 292, App	340	22	44.9	8	6	US-11-051-411-642	Sequence 642, App
268	23	46.9	9	4	US-10-367-674-119	Sequence 119, App	341	22	44.9	8	6	US-11-051-411-833	Sequence 833, App
269	23	46.9	9	4	US-10-653-624-61	Sequence 61, App1	342	22	44.9	8	6	US-11-051-411-1011	Sequence 1011, App
270	23	46.9	9	4	US-10-777-053-115	Sequence 115, App	343	22	44.9	8	6	US-11-051-411-1233	Sequence 1233, App
271	23	46.9	9	4	US-10-777-053-140	Sequence 140, App	344	22	44.9	8	6	US-11-051-411-1319	Sequence 1319, App
272	23	46.9	9	4	US-10-777-053-416	Sequence 416, App	345	22	44.9	8	6	US-11-051-411-1411	Sequence 1411, App
273	23	46.9	9	4	US-10-777-053-748	Sequence 748, App	346	22	44.9	8	6	US-11-051-411-1411	Sequence 1411, App
274	23	46.9	9	4	US-10-777-053-968	Sequence 968, App	347	22	44.9	9	3	US-09-077-214-31	Sequence 31, App1
275	23	46.9	9	4	US-10-833-439-61	Sequence 61, App1	348	22	44.9	9	3	US-09-758-128-39	Sequence 39, App1
276	23	46.9	9	4	US-10-715-417-11	Sequence 11, App1	349	22	44.9	9	3	US-09-758-426-39	Sequence 39, App1
277	23	46.9	9	4	US-10-715-417-73	Sequence 73, App1	350	22	44.9	9	3	US-09-909-460-66	Sequence 66, App1
278	23	46.9	9	4	US-10-657-022-338	Sequence 338, App	351	22	44.9	9	3	US-09-909-460-69	Sequence 69, App1
279	23	46.9	9	4	US-10-657-022-340	Sequence 340, App	352	22	44.9	9	3	US-09-758-198-39	Sequence 39, App1
280	23	46.9	9	4	US-10-657-022-347	Sequence 347, App	353	22	44.9	9	3	US-09-277-074-2	Sequence 2, App1
281	23	46.9	9	4	US-10-657-022-349	Sequence 349, App	354	22	44.9	9	3	US-09-277-074-3	Sequence 3, App1
282	23	46.9	9	4	US-10-833-745-61	Sequence 61, App1	355	22	44.9	9	3	US-09-861-661-39	Sequence 39, App1
283	23	46.9	9	4	US-10-833-744-61	Sequence 61, App1	356	22	44.9	9	3	US-09-277-064-2	Sequence 2, App1
284	23	46.9	9	4	US-10-837-217-115	Sequence 115, App	357	22	44.9	9	3	US-09-277-064-3	Sequence 3, App1
285	23	46.9	9	4	US-10-837-217-140	Sequence 140, App	358	22	44.9	9	3	US-09-872-836-66	Sequence 66, App1
286	23	46.9	9	4	US-10-837-217-416	Sequence 416, App	359	22	44.9	9	3	US-09-872-836-69	Sequence 69, App1
287	23	46.9	9	4	US-10-837-217-748	Sequence 748, App	360	22	44.9	9	4	US-10-106-487-15	Sequence 15, App1
288	23	46.9	9	4	US-10-837-217-968	Sequence 968, App	361	22	44.9	9	4	US-10-106-487-16	Sequence 16, App1
289	23	46.9	9	4	US-10-354-090-11	Sequence 11, App1	362	22	44.9	9	4	US-10-210-148-61	Sequence 61, App1
290	23	46.9	9	4	US-10-686-943-61	Sequence 61, App1	363	22	44.9	9	4	US-10-287-941-10	Sequence 10, App1
291	23	46.9	9	5	US-10-769-991-1	Sequence 1, App1	364	22	44.9	9	4	US-10-057-475B-10758	Sequence 10758, A
292	23	46.9	9	5	US-10-474-960A-6	Sequence 6, App1	365	22	44.9	9	4	US-10-057-475B-10791	Sequence 10791, A
293	23	46.9	9	5	US-10-474-960A-71	Sequence 71, App1	366	22	44.9	9	4	US-10-465-811-84	Sequence 84, App1
294	23	46.9	9	5	US-10-474-960A-148	Sequence 148, App	367	22	44.9	9	4	US-10-465-811-85	Sequence 85, App1
295	23	46.9	9	5	US-10-884-862-37	Sequence 37, App1	368	22	44.9	9	4	US-10-154-884B-10758	Sequence 10758, A
296	23	46.9	9	5	US-10-948-707-475	Sequence 475, App	369	22	44.9	9	4	US-10-154-884B-10791	Sequence 10791, A
297	23	46.9	9	5	US-10-776-521B-98	Sequence 98, App1	370	22	44.9	9	4	US-10-388-337-15	Sequence 15, App1
298	23	46.9	9	5	US-10-776-521B-402	Sequence 402, App	371	22	44.9	9	4	US-10-388-337-16	Sequence 16, App1
299	23	46.9	9	5	US-10-820-067A-98	Sequence 98, App1	372	22	44.9	9	4	US-10-149-138-584	Sequence 584, App
300	23	46.9	9	5	US-10-505-929-574	Sequence 574, App	373	22	44.9	9	4	US-10-149-138-2926	Sequence 2926, App
301	23	46.9	9	5	US-10-999-364-81	Sequence 81, App1	374	22	44.9	9	4	US-10-363-791-120	Sequence 120, App
302	23	46.9	9	5	US-10-953-769-13	Sequence 13, App1	375	22	44.9	9	4	US-10-398-104-14	Sequence 14, App1
303	23	46.9	9	6	US-11-055-119-66	Sequence 66, App1	376	22	44.9	9	4	US-10-182-252A-70	Sequence 70, App1
304	23	46.9	9	6	US-11-005-750-42	Sequence 42, App1	377	22	44.9	9	4	US-10-182-252A-73	Sequence 73, App1
305	23	46.9	9	6	US-11-005-750-48	Sequence 48, App1	378	22	44.9	9	4	US-10-182-252A-1179	Sequence 1179, App
306	23	46.9	9	6	US-11-008-958-5	Sequence 5, App1	379	22	44.9	9	4	US-10-149-138-584	Sequence 584, App
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308	22	44.9	6	3	US-09-911-838-76	Sequence 76, App1	381	22	44.9	9	5	US-10-769-991-12	Sequence 12, App1
309	22	44.9	6	3	US-09-911-838-78	Sequence 78, App1	382	22	44.9	9	5	US-10-769-991-66	Sequence 66, App1
310	22	44.9	6	3	US-09-911-838-80	Sequence 80, App1	383	22	44.9	9	5	US-10-769-991-69	Sequence 69, App1
311	22	44.9	7	3	US-09-019-679-5	Sequence 5, App1	384	22	44.9	9	5	US-10-751-845-20	Sequence 20, App1
312	22	44.9	7	3	US-09-878-957-203	Sequence 203, App	385	22	44.9	9	5	US-10-751-845-23	Sequence 23, App1
313	22	44.9	7	3	US-09-911-838-75	Sequence 75, App1	386	22	44.9	9	5	US-10-498-468A-5	Sequence 5, App1
314	22	44.9	7	3	US-09-911-838-77	Sequence 77, App1	387	22	44.9	9	6	US-11-051-411-61	Sequence 61, App1
315	22	44.9	7	3	US-09-911-838-79	Sequence 79, App1	388	22	44.9	9	6	US-11-051-411-154	Sequence 154, App
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318	22	44.9	7	3	US-09-753-139C-5	Sequence 5, App1	391	22	44.9	9	6	US-11-051-411-369	Sequence 369, App
319	22	44.9	7	4	US-10-394-980-280	Sequence 280, App	392	22	44.9	9	6	US-11-051-411-391	Sequence 391, App

393	22	44.9	9	6	US-11-051-411-530	Sequence 530, App	466	21	42.9	9	4	US-10-001-469-854	Sequence 854, App
394	22	44.9	9	6	US-11-051-411-530	Sequence 597, App	467	21	42.9	9	4	US-10-001-469-1036	Sequence 1036, App
395	22	44.9	9	6	US-11-051-411-671	Sequence 671, App	468	21	42.9	9	4	US-10-001-469-1043	Sequence 1043, App
396	22	44.9	9	6	US-11-051-411-673	Sequence 673, App	469	21	42.9	9	4	US-10-001-469-1221	Sequence 1221, App
397	22	44.9	9	6	US-11-051-411-891	Sequence 891, App	470	21	42.9	9	4	US-10-001-469-1224	Sequence 1224, App
398	22	44.9	9	6	US-11-051-411-1126	Sequence 1126, App	471	21	42.9	9	4	US-10-001-469-1298	Sequence 1298, App
399	22	44.9	9	6	US-11-051-411-1153	Sequence 1153, App	472	21	42.9	9	4	US-10-001-469-1433	Sequence 1433, App
400	22	44.9	9	6	US-11-051-411-1154	Sequence 1154, App	473	21	42.9	9	4	US-10-001-469-1457	Sequence 1457, App
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406	22	44.9	9	6	US-11-051-411-1331	Sequence 1331, App	479	21	42.9	9	4	US-10-001-469-1722	Sequence 1722, App
407	22	44.9	9	6	US-11-051-411-1399	Sequence 1399, App	480	21	42.9	9	4	US-10-001-469-1738	Sequence 1738, App
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410	21	42.9	9	4	US-10-478-521-61	Sequence 61, App1	483	21	42.9	9	4	US-10-001-469-2005	Sequence 2005, App
411	21	42.9	6	2	US-08-831-310-11	Sequence 11, App1	484	21	42.9	9	4	US-10-001-469-2073	Sequence 2073, App
412	21	42.9	6	4	US-10-039-183A-11	Sequence 11, App1	485	21	42.9	9	4	US-10-001-469-2082	Sequence 2082, App
413	21	42.9	7	5	US-10-808-187-1987	Sequence 1987, App	486	21	42.9	9	4	US-10-001-469-2097	Sequence 2097, App
414	21	42.9	7	5	US-10-807-807-1987	Sequence 1987, App	487	21	42.9	9	4	US-10-002-603-156	Sequence 156, App
415	21	42.9	8	4	US-10-357-929A-7	Sequence 7, App1	488	21	42.9	9	4	US-10-002-603-157	Sequence 157, App
416	21	42.9	8	4	US-10-367-580-247	Sequence 247, App	489	21	42.9	9	4	US-10-002-603-158	Sequence 158, App
417	21	42.9	8	4	US-10-367-593-247	Sequence 247, App	490	21	42.9	9	4	US-10-002-603-171	Sequence 171, App
418	21	42.9	8	4	US-10-367-594-247	Sequence 247, App	491	21	42.9	9	4	US-10-002-603-290	Sequence 290, App
419	21	42.9	8	4	US-10-367-654-247	Sequence 247, App	492	21	42.9	9	4	US-10-322-579-8	Sequence 8, App1
420	21	42.9	8	4	US-10-367-658-247	Sequence 247, App	493	21	42.9	9	4	US-10-195-835-156	Sequence 156, App
421	21	42.9	8	4	US-10-367-668-247	Sequence 247, App	494	21	42.9	9	4	US-10-195-835-157	Sequence 157, App
422	21	42.9	8	4	US-10-367-674-247	Sequence 247, App	495	21	42.9	9	4	US-10-195-835-158	Sequence 158, App
423	21	42.9	8	4	US-10-712-425-634	Sequence 634, App	496	21	42.9	9	4	US-10-195-835-171	Sequence 171, App
424	21	42.9	8	4	US-10-712-425-725	Sequence 725, App	497	21	42.9	9	4	US-10-195-835-290	Sequence 290, App
425	21	42.9	8	4	US-10-712-425-726	Sequence 726, App	498	21	42.9	9	4	US-10-286-333-156	Sequence 156, App
426	21	42.9	8	4	US-10-712-425-727	Sequence 727, App	499	21	42.9	9	4	US-10-286-333-157	Sequence 157, App
427	21	42.9	8	4	US-10-773-032-634	Sequence 634, App	500	21	42.9	9	4	US-10-286-333-158	Sequence 158, App
428	21	42.9	8	5	US-10-773-032-725	Sequence 725, App	501	21	42.9	9	4	US-10-286-333-171	Sequence 171, App
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430	21	42.9	8	5	US-10-773-032-727	Sequence 727, App	503	21	42.9	9	4	US-10-244-830-156	Sequence 156, App
431	21	42.9	8	5	US-10-835-405-1	Sequence 1, App1	504	21	42.9	9	4	US-10-244-830-157	Sequence 157, App
432	21	42.9	8	5	US-10-862-195-156	Sequence 156, App	505	21	42.9	9	4	US-10-244-830-158	Sequence 158, App
433	21	42.9	8	5	US-10-820-067A-226	Sequence 226, App	506	21	42.9	9	4	US-10-244-830-171	Sequence 171, App
434	21	42.9	8	5	US-09-775-805-56	Sequence 56, App1	507	21	42.9	9	4	US-10-427-717-156	Sequence 156, App
435	21	42.9	9	3	US-09-915-543-8	Sequence 8, App1	508	21	42.9	9	4	US-10-427-717-157	Sequence 157, App
436	21	42.9	9	3	US-09-938-864-156	Sequence 156, App	509	21	42.9	9	4	US-10-427-717-158	Sequence 158, App
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438	21	42.9	9	3	US-09-938-864-158	Sequence 158, App	511	21	42.9	9	4	US-10-427-717-290	Sequence 290, App
439	21	42.9	9	3	US-09-938-864-171	Sequence 171, App	512	21	42.9	9	4	US-10-664-859-8	Sequence 8, App1
440	21	42.9	9	3	US-09-938-864-171	Sequence 171, App	513	21	42.9	9	4	US-10-398-104-54	Sequence 54, App1
441	21	42.9	9	3	US-09-791-477-156	Sequence 156, App	514	21	42.9	9	4	US-10-182-252A-227	Sequence 227, App
442	21	42.9	9	3	US-09-791-477-157	Sequence 157, App	515	21	42.9	9	4	US-10-182-252A-295	Sequence 295, App
443	21	42.9	9	3	US-09-791-477-158	Sequence 158, App	516	21	42.9	9	4	US-10-182-252A-296	Sequence 296, App
444	21	42.9	9	3	US-09-791-477-171	Sequence 171, App	517	21	42.9	9	4	US-10-182-252A-297	Sequence 297, App
445	21	42.9	9	3	US-09-791-477-290	Sequence 290, App	518	21	42.9	9	4	US-10-182-252A-298	Sequence 298, App
446	21	42.9	9	3	US-09-785-019-156	Sequence 156, App	519	21	42.9	9	4	US-10-182-252A-298	Sequence 298, App
447	21	42.9	9	3	US-09-785-019-157	Sequence 157, App	520	21	42.9	9	4	US-10-182-252A-364	Sequence 364, App
448	21	42.9	9	3	US-09-785-019-158	Sequence 158, App	521	21	42.9	9	4	US-10-182-252A-365	Sequence 365, App
449	21	42.9	9	3	US-09-785-019-171	Sequence 171, App	522	21	42.9	9	4	US-10-182-252A-397	Sequence 397, App
450	21	42.9	9	3	US-09-785-019-290	Sequence 290, App	523	21	42.9	9	4	US-10-182-252A-398	Sequence 398, App
451	21	42.9	9	4	US-10-125-635A-156	Sequence 156, App	524	21	42.9	9	4	US-10-182-252A-399	Sequence 399, App
452	21	42.9	9	4	US-10-125-635A-157	Sequence 157, App	525	21	42.9	9	4	US-10-182-252A-400	Sequence 400, App
453	21	42.9	9	4	US-10-125-635A-158	Sequence 158, App	526	21	42.9	9	4	US-10-182-252A-401	Sequence 401, App
454	21	42.9	9	4	US-10-125-635A-171	Sequence 171, App	527	21	42.9	9	4	US-10-182-252A-402	Sequence 402, App
455	21	42.9	9	4	US-10-125-635A-290	Sequence 290, App	528	21	42.9	9	4	US-10-182-252A-441	Sequence 441, App
456	21	42.9	9	4	US-10-001-469-45	Sequence 45, App1	529	21	42.9	9	4	US-10-182-252A-442	Sequence 442, App
457	21	42.9	9	4	US-10-001-469-56	Sequence 56, App1	530	21	42.9	9	4	US-10-182-252A-443	Sequence 443, App
458	21	42.9	9	4	US-10-001-469-91	Sequence 91, App1	531	21	42.9	9	4	US-10-182-252A-444	Sequence 444, App
459	21	42.9	9	4	US-10-001-469-239	Sequence 239, App	532	21	42.9	9	4	US-10-182-252A-445	Sequence 445, App
460	21	42.9	9	4	US-10-001-469-259	Sequence 259, App	533	21	42.9	9	4	US-10-182-252A-446	Sequence 446, App
461	21	42.9	9	4	US-10-001-469-286	Sequence 286, App	534	21	42.9	9	4	US-10-182-252A-447	Sequence 447, App
462	21	42.9	9	4	US-10-001-469-447	Sequence 447, App	535	21	42.9	9	4	US-10-182-252A-448	Sequence 448, App
463	21	42.9	9	4	US-10-001-469-465	Sequence 465, App	536	21	42.9	9	4	US-10-182-252A-841	Sequence 841, App
464	21	42.9	9	4	US-10-001-469-493	Sequence 493, App	537	21	42.9	9	4	US-10-182-252A-1114	Sequence 1114, App
465	21	42.9	9	4	US-10-001-469-644	Sequence 644, App	538	21	42.9	9	4	US-10-182-252A-1115	Sequence 1115, App

539	21	42.9	9	4	US-10-182-252A-1116	Sequence 1116, Ap	612	20	40.8	7	5	US-10-509-307-85	Sequence 85, Appl
540	21	42.9	9	4	US-10-182-252A-1117	Sequence 1117, Ap	613	20	40.8	7	5	US-10-691-532-3	Sequence 3, Appl
541	21	42.9	9	4	US-10-182-252A-1118	Sequence 1118, Ap	614	20	40.8	7	5	US-10-862-195-1579	Sequence 1579, Ap
542	21	42.9	9	4	US-10-182-252A-1119	Sequence 1119, Ap	615	20	40.8	7	5	US-10-618-779-62	Sequence 62, Appl
543	21	42.9	9	4	US-10-182-252A-1120	Sequence 1120, Ap	616	20	40.8	7	5	US-09-833-203-39	Sequence 39, Appl
544	21	42.9	9	4	US-10-182-252A-1121	Sequence 1121, Ap	617	20	40.8	8	3	US-10-094-699-26	Sequence 26, Appl
545	21	42.9	9	4	US-10-182-252A-1122	Sequence 1122, Ap	618	20	40.8	8	4	US-10-226-007-491	Sequence 491, Appl
546	21	42.9	9	4	US-10-182-252A-1123	Sequence 1123, Ap	619	20	40.8	8	4	US-10-224-999A-2605	Sequence 2605, Ap
547	21	42.9	9	4	US-10-182-252A-1124	Sequence 1124, Ap	620	20	40.8	8	4	US-10-224-999A-2606	Sequence 2606, Ap
548	21	42.9	9	4	US-10-182-252A-1125	Sequence 1125, Ap	621	20	40.8	8	4	US-10-224-999A-2607	Sequence 2607, Ap
549	21	42.9	9	4	US-10-182-252A-1126	Sequence 1126, Ap	622	20	40.8	8	4	US-10-224-999A-2748	Sequence 2748, Ap
550	21	42.9	9	4	US-10-182-252A-1127	Sequence 1127, Ap	623	20	40.8	8	4	US-10-224-999A-2749	Sequence 2749, Ap
551	21	42.9	9	4	US-10-182-252A-1128	Sequence 1128, Ap	624	20	40.8	8	4	US-10-224-999A-2750	Sequence 2750, Ap
552	21	42.9	9	4	US-10-182-252A-1129	Sequence 1129, Ap	625	20	40.8	8	4	US-10-357-929A-43	Sequence 43, Appl
553	21	42.9	9	4	US-10-182-252A-1130	Sequence 1130, Ap	626	20	40.8	8	4	US-10-117-937-53	Sequence 53, Appl
554	21	42.9	9	4	US-10-182-252A-1131	Sequence 1131, Ap	627	20	40.8	8	4	US-10-121-456A-4	Sequence 4, Appl
555	21	42.9	9	4	US-10-182-252A-1263	Sequence 1263, Ap	628	20	40.8	8	4	US-10-657-022-53	Sequence 53, Appl
556	21	42.9	9	4	US-10-182-252A-1264	Sequence 1264, Ap	629	20	40.8	8	4	US-10-809-790-8	Sequence 8, Appl
557	21	42.9	9	4	US-10-182-252A-1266	Sequence 1266, Ap	630	20	40.8	8	4	US-10-950-163-138	Sequence 138, Appl
558	21	42.9	9	4	US-10-182-252A-1266	Sequence 1266, Ap	631	20	40.8	8	5	US-10-950-163-139	Sequence 139, Appl
559	21	42.9	9	4	US-10-648-780-156	Sequence 156, Ap	632	20	40.8	8	5	US-10-950-163-140	Sequence 140, Appl
560	21	42.9	9	4	US-10-648-780-157	Sequence 157, Ap	633	20	40.8	8	5	US-10-950-163-141	Sequence 141, Appl
561	21	42.9	9	4	US-10-648-780-158	Sequence 158, Ap	634	20	40.8	8	5	US-10-862-195-144	Sequence 144, Appl
562	21	42.9	9	4	US-10-648-780-171	Sequence 171, Ap	635	20	40.8	8	6	US-11-067-084-53	Sequence 53, Appl
563	21	42.9	9	4	US-10-648-780-230	Sequence 230, Ap	636	20	40.8	8	6	US-11-051-411-405	Sequence 405, Appl
564	21	42.9	9	4	US-10-364-645A-19	Sequence 19, Appl	637	20	40.8	8	6	US-11-067-159-53	Sequence 53, Appl
565	21	42.9	9	4	US-10-753-339-56	Sequence 56, Appl	638	20	40.8	8	6	US-11-067-159-53	Sequence 53, Appl
566	21	42.9	9	4	US-10-611-440-94	Sequence 94, Appl	639	20	40.8	9	3	US-09-829-549A-22	Sequence 22, Appl
567	21	42.9	9	4	US-10-611-440-187	Sequence 187, Ap	640	20	40.8	9	3	US-09-935-430-7	Sequence 7, Appl
568	21	42.9	9	4	US-10-611-440-188	Sequence 188, Ap	641	20	40.8	9	3	US-09-898-860-14	Sequence 14, Appl
569	21	42.9	9	5	US-10-862-195-291	Sequence 291, Ap	642	20	40.8	9	3	US-09-854-248-29	Sequence 29, Appl
570	21	42.9	9	5	US-10-862-195-295	Sequence 295, Ap	643	20	40.8	9	4	US-10-094-699-20	Sequence 20, Appl
571	21	42.9	9	5	US-10-862-195-1297	Sequence 1297, Ap	644	20	40.8	9	4	US-10-094-699-24	Sequence 24, Appl
572	20	40.8	5	4	US-10-074-225A-10	Sequence 10, Appl	645	20	40.8	9	4	US-10-094-699-44	Sequence 44, Appl
573	20	40.8	5	4	US-10-096-986-3	Sequence 3, Appl	646	20	40.8	9	4	US-10-014-340-635	Sequence 635, Appl
574	20	40.8	5	4	US-10-437-708-4	Sequence 4, Appl	647	20	40.8	9	4	US-10-211-088-349	Sequence 349, Appl
575	20	40.8	5	4	US-10-395-402-4	Sequence 4, Appl	648	20	40.8	9	4	US-10-226-007-492	Sequence 492, Appl
576	20	40.8	5	4	US-10-257-199-4	Sequence 4, Appl	649	20	40.8	9	4	US-10-226-007-504	Sequence 504, Appl
577	20	40.8	5	5	US-10-808-187-598	Sequence 598, Ap	650	20	40.8	9	4	US-10-219-850-3	Sequence 3, Appl
578	20	40.8	5	5	US-10-418-032-4	Sequence 4, Appl	651	20	40.8	9	4	US-10-197-954-116	Sequence 116, Appl
579	20	40.8	5	5	US-10-418-032-239	Sequence 239, Ap	652	20	40.8	9	4	US-10-224-999A-2610	Sequence 2610, Appl
580	20	40.8	5	5	US-10-507-734-30	Sequence 30, Appl	653	20	40.8	9	4	US-10-224-999A-2611	Sequence 2611, Appl
581	20	40.8	5	5	US-10-807-807-598	Sequence 598, Ap	654	20	40.8	9	4	US-10-224-999A-2612	Sequence 2612, Appl
582	20	40.8	6	3	US-09-766-167-24	Sequence 24, Appl	655	20	40.8	9	4	US-10-224-999A-2613	Sequence 2613, Appl
583	20	40.8	6	4	US-10-208-557-24	Sequence 24, Appl	656	20	40.8	9	4	US-10-224-999A-2753	Sequence 2753, Appl
584	20	40.8	6	4	US-10-307-956-16	Sequence 16, Appl	657	20	40.8	9	4	US-10-224-999A-2754	Sequence 2754, Appl
585	20	40.8	6	4	US-10-315-964A-403	Sequence 403, Ap	658	20	40.8	9	4	US-10-224-999A-2755	Sequence 2755, Appl
586	20	40.8	6	4	US-10-317-251A-403	Sequence 403, Ap	659	20	40.8	9	4	US-10-277-292-7	Sequence 7, Appl
587	20	40.8	6	4	US-10-184-771-14	Sequence 14, Appl	660	20	40.8	9	4	US-10-280-340-7	Sequence 7, Appl
588	20	40.8	6	4	US-10-414-524-97	Sequence 97, Appl	661	20	40.8	9	4	US-10-334-726-98	Sequence 98, Appl
589	20	40.8	6	4	US-10-774-938-24	Sequence 24, Appl	662	20	40.8	9	4	US-10-117-937-47	Sequence 47, Appl
590	20	40.8	6	5	US-10-986-646-24	Sequence 24, Appl	663	20	40.8	9	4	US-10-117-937-51	Sequence 51, Appl
591	20	40.8	6	5	US-11-064-196-14	Sequence 14, Appl	664	20	40.8	9	4	US-10-245-871-534	Sequence 534, Appl
592	20	40.8	6	6	US-09-954-385-203	Sequence 203, Ap	665	20	40.8	9	4	US-10-353-678-9	Sequence 9, Appl
593	20	40.8	7	3	US-09-954-385-242	Sequence 242, Ap	666	20	40.8	9	4	US-10-121-456A-5	Sequence 5, Appl
594	20	40.8	7	3	US-09-800-187-18	Sequence 18, Appl	667	20	40.8	9	4	US-10-671-403-9	Sequence 9, Appl
595	20	40.8	7	3	US-09-800-187-49	Sequence 49, Appl	668	20	40.8	9	4	US-10-671-419-9	Sequence 9, Appl
596	20	40.8	7	3	US-09-800-187-50	Sequence 50, Appl	669	20	40.8	9	4	US-10-670-844-9	Sequence 9, Appl
597	20	40.8	7	3	US-09-800-187-51	Sequence 51, Appl	670	20	40.8	9	4	US-10-671-134-9	Sequence 9, Appl
598	20	40.8	7	3	US-09-800-187-52	Sequence 52, Appl	671	20	40.8	9	4	US-10-363-208-125	Sequence 125, Appl
599	20	40.8	7	3	US-09-800-187-53	Sequence 53, Appl	672	20	40.8	9	4	US-10-673-098-9	Sequence 9, Appl
600	20	40.8	7	3	US-09-957-806A-242	Sequence 242, Ap	673	20	40.8	9	4	US-10-253-286-75	Sequence 75, Appl
601	20	40.8	7	4	US-10-121-456A-3	Sequence 3, Appl	674	20	40.8	9	4	US-10-182-252A-76	Sequence 76, Appl
602	20	40.8	7	4	US-10-398-104-308	Sequence 308, Ap	675	20	40.8	9	4	US-10-182-252A-75	Sequence 75, Appl
603	20	40.8	7	4	US-10-398-104-310	Sequence 310, Ap	676	20	40.8	9	4	US-10-182-252A-76	Sequence 76, Appl
604	20	40.8	7	4	US-10-783-786-22	Sequence 22, Appl	677	20	40.8	9	4	US-10-673-638-9	Sequence 9, Appl
605	20	40.8	7	4	US-10-912-512-203	Sequence 203, Ap	678	20	40.8	9	4	US-10-673-638-9	Sequence 9, Appl
606	20	40.8	7	5	US-10-912-512-203	Sequence 203, Ap	679	20	40.8	9	4	US-10-673-638-9	Sequence 9, Appl
607	20	40.8	7	5	US-10-912-512-203	Sequence 203, Ap	680	20	40.8	9	4	US-10-673-638-9	Sequence 9, Appl
608	20	40.8	7	5	US-10-912-512-203	Sequence 203, Ap	681	20	40.8	9	4	US-10-673-638-9	Sequence 9, Appl
609	20	40.8	7	5	US-10-912-512-203	Sequence 203, Ap	682	20	40.8	9	4	US-10-673-638-9	Sequence 9, Appl
610	20	40.8	7	5	US-10-235-043-203	Sequence 203, Ap	683	20	40.8	9	4	US-10-657-022-47	Sequence 47, Appl
611	20	40.8	7	5	US-10-235-043-242	Sequence 242, Ap	684	20	40.8	9	4	US-10-657-022-51	Sequence 51, Appl

685	20	40.8	9	4	US-10-671-207-9	Sequence 9, Appl	758	19	38.8	7	4	US-10-352-786-266	Sequence 266, App
686	20	40.8	9	4	US-10-685-977-14	Sequence 14, Appl	759	19	38.8	7	4	US-10-352-786-268	Sequence 268, App
687	20	40.8	9	5	US-10-760-085-116	Sequence 116, Appl	760	19	38.8	7	4	US-10-352-786-270	Sequence 270, App
688	20	40.8	9	5	US-10-673-120-9	Sequence 9, Appl	761	19	38.8	7	4	US-10-460-594-23	Sequence 23, Appl
689	20	40.8	9	5	US-10-838-289-306	Sequence 306, App	762	19	38.8	7	4	US-10-258-146A-46	Sequence 46, Appl
690	20	40.8	9	5	US-10-607-595-249	Sequence 249, App	763	19	38.8	7	4	US-10-258-146A-122	Sequence 122, App
691	20	40.8	9	5	US-10-671-412-9	Sequence 9, Appl	764	19	38.8	7	4	US-10-258-146A-156	Sequence 156, App
692	20	40.8	9	5	US-10-671-859-9	Sequence 9, Appl	765	19	38.8	7	4	US-10-423-543-52	Sequence 52, Appl
693	20	40.8	9	5	US-10-671-106-9	Sequence 9, Appl	766	19	38.8	7	4	US-10-328-953-191	Sequence 191, App
694	20	40.8	9	5	US-10-948-707-425	Sequence 425, App	767	19	38.8	7	4	US-10-328-953-267	Sequence 267, App
695	20	40.8	9	5	US-10-990-137-7	Sequence 7, Appl	768	19	38.8	7	4	US-10-328-953-301	Sequence 301, App
696	20	40.8	9	6	US-11-067-064-47	Sequence 47, Appl	769	19	38.8	7	4	US-10-610-927-7	Sequence 7, Appl
697	20	40.8	9	6	US-11-067-064-51	Sequence 51, Appl	770	19	38.8	7	4	US-10-610-927-10	Sequence 10, Appl
698	20	40.8	9	6	US-11-067-064-243	Sequence 243, App	771	19	38.8	7	4	US-10-610-927-12	Sequence 12, Appl
699	20	40.8	9	6	US-11-066-697-1346	Sequence 1346, App	772	19	38.8	7	4	US-10-610-927-13	Sequence 13, Appl
700	20	40.8	9	6	US-11-067-159-47	Sequence 47, Appl	773	19	38.8	7	4	US-10-610-927-14	Sequence 14, Appl
701	20	40.8	9	6	US-11-067-159-51	Sequence 51, Appl	774	19	38.8	7	4	US-10-610-927-15	Sequence 15, Appl
702	20	40.8	9	6	US-11-067-159-243	Sequence 243, App	775	19	38.8	7	4	US-10-610-927-16	Sequence 16, Appl
703	19, 5	39.8	9	4	US-10-149-137A-465	Sequence 465, App	776	19	38.8	7	4	US-10-258-144-81	Sequence 81, Appl
704	19	38.8	5	3	US-09-972-035A-10	Sequence 10, Appl	777	19	38.8	7	4	US-10-258-144-157	Sequence 157, App
705	19	38.8	5	4	US-10-093-895-25	Sequence 25, Appl	778	19	38.8	7	4	US-10-258-144-191	Sequence 191, App
706	19	38.8	5	4	US-10-185-050-233	Sequence 233, App	779	19	38.8	7	4	US-10-663-407-18	Sequence 18, Appl
707	19	38.8	5	4	US-10-223-172A-10	Sequence 10, Appl	780	19	38.8	7	5	US-10-613-380-20	Sequence 20, Appl
708	19	38.8	5	4	US-10-224-999A-10	Sequence 10, Appl	781	19	38.8	7	5	US-10-912-512-39	Sequence 39, Appl
709	19	38.8	5	4	US-10-352-786-129	Sequence 129, App	782	19	38.8	7	5	US-10-912-512-86	Sequence 86, Appl
710	19	38.8	5	4	US-10-663-407-10	Sequence 10, Appl	783	19	38.8	7	5	US-10-912-512-208	Sequence 208, App
711	19	38.8	5	4	US-10-703-195-30	Sequence 30, Appl	784	19	38.8	7	5	US-10-235-043-39	Sequence 39, Appl
712	19	38.8	5	5	US-10-653-706-8	Sequence 8, Appl	785	19	38.8	7	5	US-10-235-043-86	Sequence 86, Appl
713	19	38.8	5	5	US-10-653-706-9	Sequence 9, Appl	786	19	38.8	7	5	US-10-235-043-208	Sequence 208, App
714	19	38.8	6	3	US-09-873-106B-10	Sequence 10, Appl	787	19	38.8	7	5	US-10-862-195-1512	Sequence 1512, App
715	19	38.8	6	3	US-09-972-035A-12	Sequence 12, Appl	788	19	38.8	7	5	US-10-820-067A-501	Sequence 501, App
716	19	38.8	6	3	US-09-943-944E-75	Sequence 75, App	789	19	38.8	7	5	US-10-820-067A-577	Sequence 577, App
717	19	38.8	6	4	US-10-223-172A-12	Sequence 12, Appl	790	19	38.8	7	5	US-10-820-067A-611	Sequence 611, App
718	19	38.8	6	4	US-10-315-964A-392	Sequence 392, App	791	19	38.8	8	3	US-09-879-936-19	Sequence 19, Appl
719	19	38.8	6	4	US-10-315-964A-393	Sequence 393, App	792	19	38.8	8	3	US-09-972-035A-20	Sequence 20, Appl
720	19	38.8	6	4	US-10-317-251A-392	Sequence 392, App	793	19	38.8	8	4	US-10-136-734-17	Sequence 17, Appl
721	19	38.8	6	4	US-10-317-251A-393	Sequence 393, App	794	19	38.8	8	4	US-10-235-552-6	Sequence 6, Appl
722	19	38.8	6	4	US-10-317-252A-392	Sequence 392, App	795	19	38.8	8	4	US-10-283-838-21	Sequence 21, Appl
723	19	38.8	6	4	US-10-317-252A-393	Sequence 393, App	796	19	38.8	8	4	US-10-226-007-26	Sequence 26, Appl
724	19	38.8	6	4	US-10-184-771-15	Sequence 15, Appl	797	19	38.8	8	4	US-10-226-007-478	Sequence 478, App
725	19	38.8	6	4	US-10-224-999A-12	Sequence 12, Appl	798	19	38.8	8	4	US-10-052-578-23	Sequence 23, Appl
726	19	38.8	6	4	US-10-352-786-195	Sequence 195, App	799	19	38.8	8	4	US-10-052-578-94	Sequence 94, Appl
727	19	38.8	6	4	US-10-352-786-197	Sequence 197, App	800	19	38.8	8	4	US-10-223-172A-20	Sequence 20, Appl
728	19	38.8	6	4	US-10-663-407-12	Sequence 12, Appl	801	19	38.8	8	4	US-10-283-423-165	Sequence 165, App
729	19	38.8	6	5	US-10-912-764-21	Sequence 21, Appl	802	19	38.8	8	4	US-10-053-520-23	Sequence 23, Appl
730	19	38.8	6	6	US-11-064-196-15	Sequence 15, Appl	803	19	38.8	8	4	US-10-053-520-94	Sequence 94, Appl
731	19	38.8	6	6	US-11-066-697-1217	Sequence 1217, App	804	19	38.8	8	4	US-10-175-270-10	Sequence 10, Appl
732	19	38.8	7	2	US-08-769-250A-7	Sequence 7, Appl	805	19	38.8	8	4	US-10-224-999A-20	Sequence 20, Appl
733	19	38.8	7	2	US-08-769-250A-10	Sequence 10, Appl	806	19	38.8	8	4	US-10-224-999A-2604	Sequence 2604, App
734	19	38.8	7	2	US-08-769-250A-12	Sequence 12, Appl	807	19	38.8	8	4	US-10-224-999A-2747	Sequence 2747, App
735	19	38.8	7	2	US-08-769-250A-13	Sequence 13, Appl	808	19	38.8	8	4	US-10-008-524A-22	Sequence 22, Appl
736	19	38.8	7	2	US-08-769-250A-14	Sequence 14, Appl	809	19	38.8	8	4	US-10-008-524A-23	Sequence 23, Appl
737	19	38.8	7	2	US-08-769-250A-15	Sequence 15, Appl	810	19	38.8	8	4	US-10-008-524A-24	Sequence 24, Appl
738	19	38.8	7	2	US-08-769-250A-16	Sequence 16, Appl	811	19	38.8	8	4	US-10-008-524A-25	Sequence 25, Appl
739	19	38.8	7	3	US-09-794-960-6	Sequence 6, Appl	812	19	38.8	8	4	US-10-008-524A-26	Sequence 26, Appl
740	19	38.8	7	3	US-09-947-137-12	Sequence 12, Appl	813	19	38.8	8	4	US-10-213-821-165	Sequence 165, App
741	19	38.8	7	3	US-09-947-137-27	Sequence 27, Appl	814	19	38.8	8	4	US-10-053-498B-23	Sequence 23, Appl
742	19	38.8	7	3	US-09-972-035A-18	Sequence 18, Appl	815	19	38.8	8	4	US-10-053-498B-94	Sequence 94, Appl
743	19	38.8	7	3	US-09-954-385-39	Sequence 39, Appl	816	19	38.8	8	4	US-10-181-546-1	Sequence 1, Appl
744	19	38.8	7	3	US-09-954-385-86	Sequence 86, Appl	817	19	38.8	8	4	US-10-350-719-22	Sequence 22, Appl
745	19	38.8	7	3	US-09-954-385-208	Sequence 208, App	818	19	38.8	8	4	US-10-350-719-23	Sequence 23, Appl
746	19	38.8	7	4	US-10-052-578-198	Sequence 188, App	819	19	38.8	8	4	US-10-350-719-24	Sequence 24, Appl
747	19	38.8	7	4	US-10-052-578-264	Sequence 264, App	820	19	38.8	8	4	US-10-350-719-25	Sequence 25, Appl
748	19	38.8	7	4	US-10-052-578-298	Sequence 298, App	821	19	38.8	8	4	US-10-350-719-26	Sequence 26, Appl
749	19	38.8	7	4	US-10-223-172A-18	Sequence 18, Appl	822	19	38.8	8	4	US-10-352-786-339	Sequence 339, App
750	19	38.8	7	4	US-10-286-457-220	Sequence 220, App	823	19	38.8	8	4	US-10-352-786-341	Sequence 341, App
751	19	38.8	7	4	US-10-053-520-198	Sequence 188, App	824	19	38.8	8	4	US-10-352-786-343	Sequence 343, App
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753	19	38.8	7	4	US-10-053-520-298	Sequence 298, App	826	19	38.8	8	4	US-10-442-909-64	Sequence 64, Appl
754	19	38.8	7	4	US-10-224-999A-18	Sequence 18, Appl	827	19	38.8	8	4	US-10-442-909-65	Sequence 65, Appl
755	19	38.8	7	4	US-10-053-498B-188	Sequence 188, App	828	19	38.8	8	4	US-10-328-953-104	Sequence 104, App
756	19	38.8	7	4	US-10-053-498B-264	Sequence 264, App	829	19	38.8	8	4	US-10-328-953-138	Sequence 138, App
757	19	38.8	7	4	US-10-053-498B-298	Sequence 298, App	830	19	38.8	8	4	US-10-663-407-20	Sequence 20, Appl

831	19	38.8	8	4	US-10-736-048-165	Sequence 165, App	904	19	38.8	9	4	US-10-280-340-11	Sequence 11, Appl
832	19	38.8	8	4	US-10-712-425-1138	Sequence 1138, Ap	905	19	38.8	9	4	US-10-280-340-467	Sequence 467, App
833	19	38.8	8	5	US-10-654-601-8	Sequence 8, Appli	906	19	38.8	9	4	US-10-280-340-552	Sequence 552, App
834	19	38.8	8	5	US-10-654-601-201	Sequence 201, App	907	19	38.8	9	4	US-10-334-726-35	Sequence 35, Appl
835	19	38.8	8	5	US-10-654-601-1326	Sequence 1326, Ap	908	19	38.8	9	4	US-10-334-726-187	Sequence 187, App
836	19	38.8	8	5	US-10-771-032-1138	Sequence 1138, Ap	909	19	38.8	9	4	US-10-334-726-223	Sequence 223, App
837	19	38.8	8	5	US-10-833-405-2	Sequence 2, Appli	910	19	38.8	9	4	US-10-371-069-370	Sequence 370, App
838	19	38.8	8	5	US-10-862-195-157	Sequence 157, App	911	19	38.8	9	4	US-10-371-069-404	Sequence 404, App
839	19	38.8	8	5	US-10-862-195-1511	Sequence 1511, App	912	19	38.8	9	4	US-10-371-645-370	Sequence 370, App
840	19	38.8	8	5	US-10-776-521B-232	Sequence 232, App	913	19	38.8	9	4	US-10-371-645-404	Sequence 404, App
841	19	38.8	8	5	US-10-776-521B-308	Sequence 308, App	914	19	38.8	9	4	US-10-117-937-249	Sequence 249, App
842	19	38.8	8	5	US-10-776-521B-342	Sequence 342, App	915	19	38.8	9	4	US-10-371-260-370	Sequence 370, App
843	19	38.8	8	5	US-10-820-067A-414	Sequence 414, App	916	19	38.8	9	4	US-10-371-260-404	Sequence 404, App
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847	19	38.8	8	5	US-10-820-067A-852	Sequence 852, App	920	19	38.8	9	4	US-10-352-786-421	Sequence 421, App
848	19	38.8	8	5	US-10-806-062-131	Sequence 131, App	921	19	38.8	9	4	US-10-352-786-424	Sequence 424, App
849	19	38.8	9	2	US-08-801-405B-4	Sequence 4, Appli	922	19	38.8	9	4	US-10-352-786-425	Sequence 425, App
850	19	38.8	9	2	US-08-854-825-43	Sequence 43, Appl	923	19	38.8	9	4	US-10-410-894-21	Sequence 21, Appl
851	19	38.8	9	3	US-09-065-902-17	Sequence 17, Appl	924	19	38.8	9	4	US-10-245-871-288	Sequence 288, App
852	19	38.8	9	3	US-09-861-294-37	Sequence 37, Appl	925	19	38.8	9	4	US-10-442-909-18	Sequence 18, Appl
853	19	38.8	9	3	US-09-894-018-170	Sequence 170, App	926	19	38.8	9	4	US-10-057-475B-10870	Sequence 10870, A
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858	19	38.8	9	3	US-09-017-743C-76	Sequence 76, Appl	931	19	38.8	9	4	US-10-154-884B-10923	Sequence 10923, A
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861	19	38.8	9	3	US-09-935-430-11	Sequence 11, Appl	934	19	38.8	9	4	US-10-114-669-143	Sequence 143, App
862	19	38.8	9	3	US-09-935-430-467	Sequence 467, App	935	19	38.8	9	4	US-10-114-669-146	Sequence 146, App
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864	19	38.8	9	3	US-09-983-802-312	Sequence 312, App	937	19	38.8	9	4	US-10-114-669-168	Sequence 168, App
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868	19	38.8	9	3	US-09-978-309A-39	Sequence 39, Appl	941	19	38.8	9	4	US-10-114-669-508	Sequence 508, App
869	19	38.8	9	3	US-09-978-309A-43	Sequence 43, Appl	942	19	38.8	9	4	US-10-114-669-841	Sequence 841, App
870	19	38.8	9	3	US-09-854-248-11	Sequence 11, Appl	943	19	38.8	9	4	US-10-114-669-843	Sequence 843, App
871	19	38.8	9	3	US-09-833-039-20	Sequence 20, Appl	944	19	38.8	9	4	US-10-114-669-850	Sequence 850, App
872	19	38.8	9	3	US-09-973-278-287	Sequence 297, App	945	19	38.8	9	4	US-10-114-669-1149	Sequence 1149, Ap
873	19	38.8	9	4	US-10-094-699-50	Sequence 50, Appl	946	19	38.8	9	4	US-10-114-669-1157	Sequence 1157, Ap
874	19	38.8	9	4	US-10-062-710-59	Sequence 59, Appl	947	19	38.8	9	4	US-10-114-669-1176	Sequence 1176, Ap
875	19	38.8	9	4	US-10-226-007-479	Sequence 479, App	948	19	38.8	9	4	US-10-114-669-1182	Sequence 1182, Ap
876	19	38.8	9	4	US-10-254-446A-109	Sequence 109, App	949	19	38.8	9	4	US-10-114-669-1511	Sequence 1511, Ap
877	19	38.8	9	4	US-10-223-172A-24	Sequence 24, Appl	950	19	38.8	9	4	US-10-114-669-1538	Sequence 1538, Ap
878	19	38.8	9	4	US-10-223-172A-27	Sequence 27, Appl	951	19	38.8	9	4	US-10-114-669-1543	Sequence 1543, Ap
879	19	38.8	9	4	US-10-116-118-47	Sequence 47, Appl	952	19	38.8	9	4	US-10-114-669-1550	Sequence 1550, Ap
880	19	38.8	9	4	US-10-367-506-37	Sequence 37, Appl	953	19	38.8	9	4	US-10-114-669-1845	Sequence 1845, Ap
881	19	38.8	9	4	US-10-062-109A-33	Sequence 33, Appl	954	19	38.8	9	4	US-10-114-669-1868	Sequence 1868, Ap
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885	19	38.8	9	4	US-10-022-066-341	Sequence 341, App	958	19	38.8	9	4	US-10-114-669-2222	Sequence 2222, Ap
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888	19	38.8	9	4	US-10-224-999A-27	Sequence 27, Appl	961	19	38.8	9	4	US-10-114-669-5006	Sequence 5006, Ap
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890	19	38.8	9	4	US-10-224-999A-2752	Sequence 2752, Ap	963	19	38.8	9	4	US-10-114-669-5029	Sequence 5029, Ap
891	19	38.8	9	4	US-10-364-614-3	Sequence 3, Appli	964	19	38.8	9	4	US-10-114-669-5038	Sequence 5038, Ap
892	19	38.8	9	4	US-10-239-313A-269	Sequence 269, App	965	19	38.8	9	4	US-10-114-669-5054	Sequence 5054, Ap
893	19	38.8	9	4	US-10-239-313A-271	Sequence 271, App	966	19	38.8	9	4	US-10-114-669-5060	Sequence 5060, Ap
894	19	38.8	9	4	US-10-177-277-20	Sequence 20, Appl	967	19	38.8	9	4	US-10-114-669-5067	Sequence 5067, Ap
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897	19	38.8	9	4	US-10-005-480A-368	Sequence 368, App	970	19	38.8	9	4	US-10-114-669-5128	Sequence 5128, Ap
898	19	38.8	9	4	US-10-005-480A-654	Sequence 654, App	971	19	38.8	9	4	US-10-114-669-5133	Sequence 5133, Ap
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900	19	38.8	9	4	US-10-277-292-467	Sequence 467, App	973	19	38.8	9	4	US-10-114-669-5182	Sequence 5182, Ap
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9 4 US-10-620-462-5 Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-10-447-161-98
; Sequence 98, Application US/10447161
; Publication No. US20040023314A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Rong-fu
; TITLE OF INVENTION: Mutant Fibronectin and Tumor Metastasis
; FILE REFERENCE: HO-P02484US1
; CURRENT APPLICATION NUMBER: US/10/447,161
; CURRENT FILING DATE: 2003-05-28
; PRIOR APPLICATION NUMBER: 60/383,530
; PRIOR FILING DATE: 2002-05-28
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 98
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-10-447-161-98

Query Match 100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
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Db 1 STAPPVHNV 9
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RESULT 2
US-09-909-460-55
; Sequence 55, Application US/09909460
; Publication No. US20020182258A1
; GENERAL INFORMATION:
; APPLICANT: Lunsford, Lynn B.
; APPLICANT: Putnam, David
; APPLICANT: Hedley, Mary Lynn
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF NUCLEIC
; TITLE OF INVENTION: ACID
; FILE REFERENCE: 08191/014001
; CURRENT APPLICATION NUMBER: US/09/909,460
; CURRENT FILING DATE: 2001-07-18

; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/321,346
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-460-55

Query Match 79.6%; Score 39; DB 3; Length 9;
Best Local Similarity 77.8%; Pred. No. 1.7e+06;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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RESULT 3
US-09-872-836-55
; Sequence 55, Application US/09872836
; Publication No. US20040142475A1
; GENERAL INFORMATION:
; APPLICANT: Barman, Shikha P.
; APPLICANT: McKeever, Una
; APPLICANT: Hedley, Mary Lynne
; TITLE OF INVENTION: DELIVERY SYSTEMS FOR BIOACTIVE AGENTS
; FILE REFERENCE: 08191-018001
; CURRENT APPLICATION NUMBER: US/09/872,836
; CURRENT FILING DATE: 2001-06-01
; PRIOR APPLICATION NUMBER: US 60/208,830
; PRIOR FILING DATE: 2000-06-02
; NUMBER OF SEQ ID NOS: 120
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 55
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-872-836-55

Query Match 79.6%; Score 39; DB 3; Length 9;
Best Local Similarity 77.8%; Pred. No. 1.7e+06;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
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Db 1 STAPPVHNV 9
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RESULT 4
US-10-447-161-97
; Sequence 97, Application US/10447161
; Publication No. US20040023314A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Rong-fu
; TITLE OF INVENTION: Mutant Fibronectin and Tumor Metastasis
; FILE REFERENCE: HO-P02484US1
; CURRENT APPLICATION NUMBER: US/10/447,161
; CURRENT FILING DATE: 2003-05-28
; PRIOR APPLICATION NUMBER: 60/383,530
; PRIOR FILING DATE: 2002-05-28
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 97
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-10-447-161-97
Query Match 79.6%; Score 39; DB 4; Length 9;

Best Local Similarity 77.8%; Pred. No. 1.7e+06; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPVHNV 9
Db 1 STAPPAGV 9

RESULT 5

US-10-296-317-44
; Sequence 44, Application US/10296317
; Publication No. US20040057968A1
; GENERAL INFORMATION:
; APPLICANT: Cel-Sci Corp
; APPLICANT: Zimmerman, Daniel S
; APPLICANT: Savin, Prem S
; TITLE OF INVENTION: T CELL BINDING LIGAND PEPTIDES, PEPTIDE
; FILE REFERENCE: CS-112
; CURRENT APPLICATION NUMBER: US/10/296,317
; CURRENT FILING DATE: 2002-11-22
; PRIOR APPLICATION NUMBER: US 60/206548
; PRIOR FILING DATE: 2000-05-24
; PRIOR APPLICATION NUMBER: PCT/US07/16793
; PRIOR FILING DATE: 2001-05-24
; NUMBER OF SEQ ID NOS: 96
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 44
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Muc1 Peptide M1b
US-10-296-317-44

Query Match 79.6%; Score 39; DB 4; Length 9;
Best Local Similarity 77.8%; Pred. No. 1.7e+06; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPVHNV 9
Db 1 STAPPAGV 9

RESULT 6

US-10-758-970-55
; Sequence 55, Application US/10758970
; Publication No. US20050037086A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Hsu, Yung-Yueh
; APPLICANT: Tyo, Michael
; TITLE OF INVENTION: CONTINUOUS-FLOW METHOD FOR PREPARING MICROPARTICLES
; FILE REFERENCE: 08191-012001
; CURRENT APPLICATION NUMBER: US/10/758,970
; CURRENT FILING DATE: 2004-01-16
; PRIOR APPLICATION NUMBER: US/09/715,708A
; PRIOR FILING DATE: 2000-11-17
; PRIOR APPLICATION NUMBER: US 60/166,516
; PRIOR FILING DATE: 1999-11-19
; NUMBER OF SEQ ID NOS: 109
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 55
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-758-970-55

Query Match 79.6%; Score 39; DB 5; Length 9;
Best Local Similarity 77.8%; Pred. No. 1.7e+06; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPVHNV 9
Db 1 STAPPAGV 9

Best Local Similarity 77.8%; Pred. No. 1.7e+06; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPVHNV 9
Db 1 STAPPAGV 9

RESULT 7

US-10-751-845-9
; Sequence 9, Application US/10751845
; Publication No. US20050100928A1
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Urban, Robert G.
; APPLICANT: Chiczo, Roman M.
; TITLE OF INVENTION: NUCLEIC ACIDS ENCODING POLYPEPTIDE POLYPEPTIDES
; FILE REFERENCE: 08191-013001
; CURRENT APPLICATION NUMBER: US/10/751,845
; CURRENT FILING DATE: 2004-01-05
; PRIOR APPLICATION NUMBER: US/09/664,225
; PRIOR FILING DATE: 2000-08-18
; PRIOR APPLICATION NUMBER: US 60/169,846
; PRIOR FILING DATE: 1999-12-09
; PRIOR APPLICATION NUMBER: US 60/154,665
; PRIOR FILING DATE: 1999-09-16
; NUMBER OF SEQ ID NOS: 163
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-751-845-9

Query Match 79.6%; Score 39; DB 5; Length 9;
Best Local Similarity 77.8%; Pred. No. 1.7e+06; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPVHNV 9
Db 1 STAPPAGV 9

RESULT 8

US-10-973-927-19
; Sequence 19, Application US/10973927
; Publication No. US20050215501A1
; GENERAL INFORMATION:
; APPLICANT: Lipford, Grayson
; APPLICANT: Whisnant, John
; TITLE OF INVENTION: METHODS AND PRODUCTS FOR ENHANCING EPITOPE SPREADING
; FILE REFERENCE: C1037.70054US01
; CURRENT APPLICATION NUMBER: US/10/973,927
; CURRENT FILING DATE: 2004-10-25
; PRIOR APPLICATION NUMBER: US 60/514,255
; PRIOR FILING DATE: 2003-10-24
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: Patent in version 3.3
; SEQ ID NO 19
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide
US-10-973-927-19

Query Match 75.5%; Score 37; DB 5; Length 8;
Best Local Similarity 75.0%; Pred. No. 1.7e+06; Mismatches 1; Indels 0; Gaps 0;

QY 2 TAPPVHNV 9
Db 1 STAPPVHNV 8

RESULT 9
US-09-994-466-10
; Sequence 10, Application US/09994466

```

; Publication No. US20020132771A1
; GENERAL INFORMATION:
; APPLICANT: Madiyalakan, R.
; TITLE OF INVENTION: THERAPEUTIC BINDING AGENTS AGAINST MUC-1 ANTIGEN AND METHODS FOR
; FILE REFERENCE: AREX-P03-002
; CURRENT APPLICATION NUMBER: US/09/994,466
; PRIOR FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: 09/724094
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 10
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-994-466-10

Query Match      65.3%; Score 32; DB 3; Length 8;
Best Local Similarity 71.4%; Pred. No. 1.7e+06;
Matches 5; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPVH 7
Db 2 TTAPPAH 8

RESULT 10
US-10-080-013-20
; Sequence 20, Application US/10080013
; Publication No. US2003007248A1
; GENERAL INFORMATION:
; APPLICANT: Moriarty, Ann
; APPLICANT: Leturcq, Didier
; APPLICANT: Degraw, Juli
; APPLICANT: Heiskala, Marja
; APPLICANT: Peterson, Per
; APPLICANT: Jackson, Michael
; TITLE OF INVENTION: A CELL THERAPY METHOD FOR THE TREATMENT OF TUMORS
; FILE REFERENCE: ORT-1557
; CURRENT APPLICATION NUMBER: US/10/080,013
; CURRENT FILING DATE: 2002-02-19
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 20
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-080-013-20

Query Match      64.3%; Score 31.5; DB 4; Length 8;
Best Local Similarity 88.9%; Pred. No. 1.7e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 STAPPVH 9
Db 1 STA-PVHNV 8

RESULT 11
US-10-289-566-20
; Sequence 20, Application US/10289566
; Publication No. US20040071671A1
; GENERAL INFORMATION:
; APPLICANT: Leturcq, Didier J.
; APPLICANT: Moriarty, Ann M.
; APPLICANT: Jackson, Michael R.
; APPLICANT: Peterson, Per A.
; APPLICANT: Richards, Jon M.
; TITLE OF INVENTION: A CELL THERAPY METHOD FOR THE TREATMENT OF TUMORS
; FILE REFERENCE: ORT 1342CJP
; CURRENT APPLICATION NUMBER: US/10/289,566
; CURRENT FILING DATE: 2002-11-07

```

```

; PRIOR APPLICATION NUMBER: US 60/270,252
; PRIOR FILING DATE: 2001-02-20
; PRIOR APPLICATION NUMBER: US 10/080,013
; PRIOR FILING DATE: 2002-02-19
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 20
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-289-566-20

```

```

Query Match      64.3%; Score 31.5; DB 4; Length 8;
Best Local Similarity 88.9%; Pred. No. 1.7e+06;
Matches 8; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

```

```

Qy 1 STAPPVHNV 9
Db 1 STA-PVHNV 8

```

```

RESULT 12
US-09-994-466-7
; Sequence 7, Application US/09994466
; Publication No. US20020132771A1
; GENERAL INFORMATION:
; APPLICANT: Madiyalakan, R.
; TITLE OF INVENTION: THERAPEUTIC BINDING AGENTS AGAINST MUC-1 ANTIGEN AND METHODS FOR
; FILE REFERENCE: AREX-P03-002
; CURRENT APPLICATION NUMBER: US/09/994,466
; PRIOR FILING DATE: 2001-11-26
; PRIOR APPLICATION NUMBER: 09/724094
; PRIOR FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 6
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-994-466-7

```

```

Query Match      63.3%; Score 31; DB 3; Length 6;
Best Local Similarity 83.3%; Pred. No. 1.7e+06;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

Qy 2 TAPPVH 7
Db 1 TAPPAH 6

```

```

RESULT 13
US-11-055-119-3
; Sequence 3, Application US/11055119
; Publication No. US20050142640A1
; GENERAL INFORMATION:
; APPLICANT: Taylor-Papadimitriou, Joyce
; APPLICANT: Heukamp, Lukas Carl
; APPLICANT: Offringa, Rienk
; APPLICANT: Melief, Cornelis Johanna Maria
; APPLICANT: Acres, Bruce
; APPLICANT: Thomas, Mirelle
; TITLE OF INVENTION: MUC-1 derived peptides
; FILE REFERENCE: 029395-017
; CURRENT APPLICATION NUMBER: US/11/055,119
; CURRENT FILING DATE: 2005-02-11
; PRIOR APPLICATION NUMBER: US/09/658,621
; PRIOR FILING DATE: 2000-09-08
; PRIOR APPLICATION NUMBER: US 60/187,215
; PRIOR FILING DATE: 2000-03-03
; PRIOR APPLICATION NUMBER: GB 9921242.5

```


;; PRIOR FILING DATE: 1999-09-08
;; PRIOR APPLICATION NUMBER: EP 99 40 2237.4
;; PRIOR FILING DATE: 1999-09-10
;; NUMBER OF SEQ ID NOS: 80
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 3
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-11-055-119-3

Query Match 63.3%; Score 31; DB 6; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPV 6
|||
Db 4 STAPPV 9

RESULT 14
US-10-334-726-100
;; Sequence 100, Application US/10334726
;; Publication No. US20030211521A1
;; GENERAL INFORMATION:
;; TITLE OF INVENTION: TAYLOR-PAPADIMITROU, JOYCE
;; FILE REFERENCE: 1090-36
;; CURRENT APPLICATION NUMBER: US/10/334,726
;; CURRENT FILING DATE: 2003-01-02
;; PRIOR APPLICATION NUMBER: US/09/645,446
;; PRIOR FILING DATE: 2000-08-25
;; PRIOR APPLICATION NUMBER: PCT/GB99/00866
;; PRIOR FILING DATE: 1999-03-19
;; PRIOR APPLICATION NUMBER: GB 9805877.9
;; PRIOR FILING DATE: 1998-09-20
;; NUMBER OF SEQ ID NOS: 324
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 100
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: Artificial Sequence
;; FEATURE:
;; OTHER INFORMATION: Description of Artificial Sequence: predicted
US-10-334-726-100

Query Match 57.1%; Score 28; DB 4; Length 9;
Best Local Similarity 66.7%; Pred. No. 1.7e+06;
Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PPVHNV 9
|||
Db 4 PPLHDV 9

RESULT 15
US-09-077-214-28
;; Sequence 28, Application US/09077214
;; Publication No. US20020085997A1
;; GENERAL INFORMATION:
;; APPLICANT: Schmidt, Walter
;; APPLICANT: Birnstiel, Max
;; APPLICANT: Schweighoffer, Tamas
;; APPLICANT: Steinlein, Peter
;; APPLICANT: Buschle, Michael
;; TITLE OF INVENTION: Tumor Vaccine And Process For the
;; PREPARATION THEREOF
;; NUMBER OF SEQUENCES: 33
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
;; STREET: 1100 New York Avenue N.W.
;; CITY: Washington

;; STATE: D.C.
;; COUNTRY: U.S.A.
;; ZIP: 20005
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/077,214
;; FILING DATE:
;; CLASSIFICATION: 424
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: DE 195 43 649.0
;; FILING DATE: 23-NOV-1995
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: DE 196 07 044.9
;; FILING DATE: 24-FEB-1996
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Fleisher, Raz E.
;; REGISTRATION NUMBER: 34,331
;; REFERENCE/DOCKET NUMBER: 0652.1710000
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 202-371-2600
;; TELEFAX: 202-371-2540
;; INFORMATION FOR SEQ ID NO: 28:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 9 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: single
;; TOPOLOGY: not relevant
;; MOLECULE TYPE: peptide
US-09-077-214-28

Query Match 55.1%; Score 27; DB 3; Length 9;
Best Local Similarity 57.1%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 3 APPVHNV 9
|||
Db 3 APPQHEI 9

RESULT 16
US-11-055-119-9
;; Sequence 9, Application US/11055119
;; Publication No. US20050142640A1
;; GENERAL INFORMATION:
;; APPLICANT: Taylor-Papadimitriou, Joyce
;; APPLICANT: Heukamp, Lukas Carl
;; APPLICANT: Offringa, Rienk
;; APPLICANT: Melief, Cornelis Johanna Maria
;; APPLICANT: Acres, Bruce
;; APPLICANT: Thomas, Mireille
;; TITLE OF INVENTION: MUC-1 derived peptides
;; FILE REFERENCE: 029395-017
;; CURRENT APPLICATION NUMBER: US/11/055,119
;; CURRENT FILING DATE: 2005-02-11
;; PRIOR APPLICATION NUMBER: US/09/658,621
;; PRIOR FILING DATE: 2000-09-08
;; PRIOR APPLICATION NUMBER: US 60/187,215
;; PRIOR FILING DATE: 2000-03-03
;; PRIOR APPLICATION NUMBER: GB 9921242.5
;; PRIOR FILING DATE: 1999-09-08
;; PRIOR APPLICATION NUMBER: EP 99 40 2237.4
;; PRIOR FILING DATE: 1999-09-10
;; NUMBER OF SEQ ID NOS: 80
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 9
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-11-055-119-9

Query Match 55.1%; Score 27; DB 6; Length 9;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPP 5
|||
Db 4 STAPP 8

RESULT 17
US-10-473-127-175
; Sequence 175, Application US/10473127
; Publication No. US20040236091A1
; GENERAL INFORMATION:
; APPLICANT: Zycos Inc.
; TITLE OF INVENTION: TRANSLATIONAL PROFILING
; FILE REFERENCE: 08191-026W01
; CURRENT APPLICATION NUMBER: US/10/473,127
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 60/279,495
; PRIOR FILING DATE: 2001-03-28
; PRIOR APPLICATION NUMBER: 60/292,544
; PRIOR FILING DATE: 2001-05-21
; PRIOR APPLICATION NUMBER: 60/310,801
; PRIOR FILING DATE: 2001-08-08
; PRIOR APPLICATION NUMBER: 60/326,370
; PRIOR FILING DATE: 2001-10-01
; PRIOR APPLICATION NUMBER: 60/336,780
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 60/358,985
; PRIOR FILING DATE: 2002-02-20
; NUMBER OF SEQ ID NOS: 2041
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 175
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-473-127-175

Query Match 53.1%; Score 26; DB 5; Length 8;
Best Local Similarity 66.7%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 PPVHNV 9
|||
Db 3 PPVNI 8

RESULT 18
US-09-879-936-22
; Sequence 22, Application US/09879936
; Patent No. US20020045564A1
; GENERAL INFORMATION:
; APPLICANT: Van Eyk, Jennifer E.
; APPLICANT: Mak, Alan S.
; APPLICANT: Cote, Graham P.
; TITLE OF INVENTION: Methods of Modulating Muscle Contraction
; FILE REFERENCE: 1997-021-03US
; CURRENT APPLICATION NUMBER: US/09/879,936
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: 60/050,478
; PRIOR FILING DATE: 1997-06-23
; PRIOR APPLICATION NUMBER: 60/089,505
; PRIOR FILING DATE: 1998-06-16
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 22
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; NAME/KEY: PEPTIDE

; LOCATION: (1)-(9)
; OTHER INFORMATION: PAK site A autophosphorylation
; NAME/KEY: PEPTIDE
; LOCATION: (9)
; OTHER INFORMATION: Targeted Ser phospho-amino acid
US-09-879-936-22

Query Match 51.0%; Score 25; DB 3; Length 9;
Best Local Similarity 66.7%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 3 APPVHN 8
|||
Db 2 APPWRN 7

RESULT 19
US-10-001-546-67
; Sequence 67, Application US/10001546
; Publication No. US20030027766A1
; GENERAL INFORMATION:
; APPLICANT: IOANNIDES, CONSTANTIN G.
; APPLICANT: FISK, BRYAN A.
; APPLICANT: IOANNIDES, MARIA G.
; TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR STIMULATING
; TITLE OF INVENTION: T-LYMPHOCYTES
; FILE REFERENCE: UTSC:390USC2
; CURRENT APPLICATION NUMBER: US/10/001,546
; CURRENT FILING DATE: 2001-10-31
; PRIOR APPLICATION NUMBER: 08/403,459
; PRIOR FILING DATE: 1995-03-14
; NUMBER OF SEQ ID NOS: 68
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 67
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
US-10-001-546-67

Query Match 51.0%; Score 25; DB 4; Length 9;
Best Local Similarity 55.6%; Pred. No. 1.7e+06;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
|||
Db 1 SLADPAHGV 9

RESULT 20
US-10-182-252A-170
; Sequence 170, Application US/10182252A
; Publication No. US20040072162A1
; GENERAL INFORMATION:
; APPLICANT: FOMSGAARD, ANDERS
; APPLICANT: BRUNAK, SOREN
; APPLICANT: BUUS, SOREN
; APPLICANT: CORBET, SYLVIE
; APPLICANT: LAUEMOLLER, SANNE LISE
; APPLICANT: HANSEN, JAN
; TITLE OF INVENTION: HIV PEPTIDE AND NUCLEIC ACIDS ENCODING THEM FOR DIAGNOSIS AND
; TITLE OF INVENTION: CONTROL OF HIV INFECTIONS
; FILE REFERENCE: 030307/0205
; CURRENT APPLICATION NUMBER: US/10/182,252A
; CURRENT FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: PCT/DK01/00059
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: EP 00610017.6
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: US 60/179,333
; PRIOR FILING DATE: 2000-01-31

```
; NUMBER OF SEQ ID NOS: 1388
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 170
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: HIV peptide
US-10-182-252A-170

Query Match          51.0%; Score 25; DB 4; Length 9;
Best Local Similarity 57.1%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 3 APPVHV 9
   |||: |
DB 3 APPIQV 9

RESULT 21
US-10-182-252A-172
; Sequence 172, Application US/10182252A
; Publication No. US20040072162A1
; GENERAL INFORMATION:
; APPLICANT: FOMSGAARD, ANDERS
; APPLICANT: BRUNAK, SOREN
; APPLICANT: BUUS, SOREN
; APPLICANT: CORBET, SYLVIE
; APPLICANT: LAUEMOLLER, SANNE LISE
; APPLICANT: HANSEN, JAN
; TITLE OF INVENTION: HIV PEPTIDE AND NUCLEIC ACIDS ENCODING THEM FOR DIAGNOSIS AND
; FILE REFERENCE: 030307/0205
; CURRENT APPLICATION NUMBER: US/10/182,252A
; PRIOR FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: PCT/DK01/00059
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: EP 00610017.6
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: US 60/179,333
; PRIOR FILING DATE: 2000-01-31
; NUMBER OF SEQ ID NOS: 1388
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 172
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: HIV peptide
US-10-182-252A-172

Query Match          51.0%; Score 25; DB 4; Length 9;
Best Local Similarity 57.1%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 3 APPVHV 9
   |||: |
DB 3 APPIQV 9

RESULT 22
US-10-611-440-14
; Sequence 14, Application US/10611440
; Publication No. US20040197912A1
; GENERAL INFORMATION:
; APPLICANT: Berinstein, Neil
; APPLICANT: Gallichan, Scott
; APPLICANT: Lovitt, Corey
; APPLICANT: Parrington, Mark
; APPLICANT: Pedyczak, Artur
; APPLICANT: Radvanyi, Laszlo
; APPLICANT: Singh-Sandhu, Devender
; APPLICANT: Oomen, Raymond P
```

```
; APPLICANT: Cao, Shi-Xian
; TITLE OF INVENTION: Tumor Antigens BFA4 and BCY1 for Prevention and/or Treatment of
; FILE REFERENCE: API-02-11-US
; CURRENT APPLICATION NUMBER: US/10/611,440
; CURRENT FILING DATE: 2003-07-01
; PRIOR APPLICATION NUMBER: US 60/394,346
; PRIOR FILING DATE: 2002-07-03
; PRIOR APPLICATION NUMBER: US 60/394,503
; PRIOR FILING DATE: 2002-07-09
; PRIOR APPLICATION NUMBER: US 60/411,833
; PRIOR FILING DATE: 2002-09-18
; PRIOR APPLICATION NUMBER: US 60/445,342
; PRIOR FILING DATE: 2003-02-06
; NUMBER OF SEQ ID NOS: 218
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 14
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: CLP-2422
US-10-611-440-14

Query Match          51.0%; Score 25; DB 4; Length 9;
Best Local Similarity 66.7%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 4 PPVHV 9
   |||: |
DB 4 PPLRV 9

RESULT 23
US-09-954-385-198
; Sequence 198, Application US/09954385
; Publication No. US20030100467A1
; GENERAL INFORMATION:
; APPLICANT: Aehle, Wolfgang
; APPLICANT: Baldwin, Toby L.
; APPLICANT: Van Gastel, Franciscus J.C.
; APPLICANT: Janssen, Giselle G.
; APPLICANT: Murray, Christopher J.
; APPLICANT: Wang, Huaming
; APPLICANT: Winetzky, Deborah S.
; TITLE OF INVENTION: Binding Phenol Oxidizing Enzyme-peptide
; FILE REFERENCE: GC690
; CURRENT APPLICATION NUMBER: US/09/954,385
; CURRENT FILING DATE: 2001-09-12
; NUMBER OF SEQ ID NOS: 433
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 198
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: binding peptide
US-09-954-385-198

Query Match          49.0%; Score 24; DB 3; Length 7;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPP 5
   :|||
DB 1 TTAPP 5

RESULT 24
US-10-912-512-198
; Sequence 198, Application US/10912512
; Publication No. US20050042684A1
```

; GENERAL INFORMATION:
; APPLICANT: Ahhle, Wolfgang
; APPLICANT: Baldwin, Toby L.
; APPLICANT: Van Gastel, Franciscus J.C.
; APPLICANT: Janssen, Giselle G.
; APPLICANT: Murray, Christopher J.
; APPLICANT: Wang, Huaming
; APPLICANT: Winetzky, Deborah S.
; TITLE OF INVENTION: Binding Phenol Oxidizing Enzyme-peptide
; TITLE OF INVENTION: Complexes
; FILE REFERENCE: GC690
; CURRENT APPLICATION NUMBER: US/10/912,512
; CURRENT FILING DATE: 2004-08-05
; PRIOR APPLICATION NUMBER: US/09/954,385
; PRIOR FILING DATE: 2001-09-12
; NUMBER OF SEQ ID NOS: 433
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 198
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: binding peptide
US-10-912-512-198

Query Match 49.0%; Score 24; DB 5; Length 7;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPP 5
:||||
Db 1 TTAPP 5

RESULT 25
US-10-235-043-198
; Sequence 198, Application US/10235043
; Publication No. US20050058996A1
; GENERAL INFORMATION:
; APPLICANT: Ahhle, Wolfgang
; APPLICANT: Baldwin, Toby M.
; APPLICANT: Van Gastel, Franciscus J.C.
; APPLICANT: Janssen, Giselle G.
; APPLICANT: Murray, Christopher J.
; APPLICANT: Wang, Huaming
; APPLICANT: Winetzky, Deborah S.
; TITLE OF INVENTION: Binding Phenol Oxidizing Enzyme-Peptide
; TITLE OF INVENTION: Complexes
; FILE REFERENCE: GC690-2
; CURRENT APPLICATION NUMBER: US/10/235,043
; CURRENT FILING DATE: 2002-09-03
; NUMBER OF SEQ ID NOS: 446
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 198
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: binding peptide
US-10-235-043-198

Query Match 49.0%; Score 24; DB 5; Length 7;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPP 5
:||||
Db 1 TTAPP 5

RESULT 26
US-10-786-850-33
; Sequence 33, Application US/10786850

; Publication No. US20040209343A1
; GENERAL INFORMATION:
; APPLICANT: Svendsen, Allan
; APPLICANT: Draborg, Henriette
; TITLE OF INVENTION: Subtilase variants
; FILE REFERENCE: 10203
; CURRENT APPLICATION NUMBER: US/10/786,850
; CURRENT FILING DATE: 2004-02-24
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 33
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Highly mobile region of Savinase
US-10-786-850-33

Query Match 49.0%; Score 24; DB 4; Length 8;
Best Local Similarity 66.7%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 APPVHN 8
:||||
Db 3 APAAHN 8

RESULT 27
US-11-051-411-80
; Sequence 80, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Cheemut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: P53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 80
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-80

Query Match 49.0%; Score 24; DB 6; Length 8;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
:||||
Db 3 APPQH 7

RESULT 28
US-11-051-411-107

```
; Sequence 107, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR FILING DATE: 1999-12-10
; PRIOR FILING DATE: 1999-12-10
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 107
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-107

Query Match 49.0%; Score 24; DB 6; Length 8;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
Db 2 APPQH 6

RESULT 29
US-11-051-411-287
; Sequence 287, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR FILING DATE: 1999-12-10
; PRIOR FILING DATE: 1999-12-10
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 287
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
```

```
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-287

Query Match 49.0%; Score 24; DB 6; Length 8;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
Db 3 APPQH 7

RESULT 30
US-11-051-411-496
; Sequence 496, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 496
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-496

Query Match 49.0%; Score 24; DB 6; Length 8;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
Db 2 APPQH 6

RESULT 31
US-11-051-411-667
; Sequence 667, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
```

; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1998-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 667
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-667

Query Match 49.0%; Score 24; DB 6; Length 8;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
||| |
Db 4 APPQH 8

RESULT 32
US-11-051-411-887
; Sequence 887, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Cells, Esteban
; APPLICANT: Keogh, Elisa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; FILE REFERENCE: 2060, 0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1998-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 887
; LENGTH: 8
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-887

Query Match 49.0%; Score 24; DB 6; Length 8;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
||| |
Db 4 APPQH 8

RESULT 33

US-09-932-369A-5
; Sequence 5, Application US/09932369A
; Publication No. US20020123055A1
; GENERAL INFORMATION:
; APPLICANT: Estell, David A.
; APPLICANT: Ganshaw, Grant C.
; APPLICANT: Paech, Christian
; APPLICANT: Paech, Sigrid
; TITLE OF INVENTION: Mass Spectrometric Analysis of
; FILE REFERENCE: GC626-2
; CURRENT APPLICATION NUMBER: US/09/932,369A
; PRIOR FILING DATE: 2001-08-17
; PRIOR APPLICATION NUMBER: US 60/228,198
; PRIOR FILING DATE: 2000-08-25
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: tryptic co-digest of 15N-subtilisin DAI and
; OTHER INFORMATION: subtilisin
US-09-932-369A-5

Query Match 49.0%; Score 24; DB 3; Length 9;
Best Local Similarity 66.7%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 3 APPVH 8
||| |
Db 3 APAHN 8

RESULT 34
US-09-833-203-38
; Sequence 38, Application US/09833203
; Publication No. US20030166277A1
; GENERAL INFORMATION:
; APPLICANT: Zauderer, Maurice
; APPLICANT: Smith, Ernest S.
; TITLE OF INVENTION: Targeted Vaccine Delivery Systems
; FILE REFERENCE: 1821,0020001
; CURRENT APPLICATION NUMBER: US/09/833,203
; CURRENT FILING DATE: 2001-04-12
; PRIOR APPLICATION NUMBER: US 60/196,472
; PRIOR FILING DATE: 2000-04-12
; NUMBER OF SEQ ID NOS: 63
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 38
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc.feature
; OTHER INFORMATION: C35 peptides
US-09-833-203-38

Query Match 49.0%; Score 24; DB 3; Length 9;
Best Local Similarity 55.6%; Pred. No. 1.7e+06;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 STAPPVHNV 9
| | | | |
Db 1 SVAPPPBEV 9

RESULT 35
US-10-809-790-7
; Sequence 7, Application US/10809790
; Publication No. US20040210037A1
; GENERAL INFORMATION:

```
; APPLICANT: Zauderer, Maurice
; APPLICANT: Paris, Mark J.
; APPLICANT: Smith, Ernest S.
; TITLE OF INVENTION: Targeted MHC Class I Alpha3 Vaccine Delivery Systems
; FILE REFERENCE: 1843.0120001
; CURRENT APPLICATION NUMBER: US/10/809,790
; CURRENT FILING DATE: 2004-03-26
; PRIOR APPLICATION NUMBER: US 60/457,896
; PRIOR FILING DATE: 2003-03-28
; NUMBER OF SEQ ID NOS: 53
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 7
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-809-790-7

Query Match          49.0%; Score 24; DB 4; Length 9;
Best Local Similarity 55.8%; Pred. No. 1.7e+06;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 STAPPVHV 9
   |||||
Db 1 SVAPPEEV 9

RESULT 36
US-10-862-195-1350
; Sequence 1350, Application US/10862195
; Publication No. US20050164324A1
; GENERAL INFORMATION:
; APPLICANT: GYGI, STEVEN P.
; TITLE OF INVENTION: SYSTEMS, METHODS AND KITS FOR CHARACTERIZING PHOSPHOPROTEOMES
; FILE REFERENCE: 58890(70207)
; CURRENT APPLICATION NUMBER: US/10/862,195
; CURRENT FILING DATE: 2004-06-04
; PRIOR APPLICATION NUMBER: 60/476,010
; PRIOR FILING DATE: 2003-06-04
; NUMBER OF SEQ ID NOS: 2245
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1350
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: See specification as filed for preferred embodiments
; OTHER INFORMATION: and description of phosphorylation sites
US-10-862-195-1350

Query Match          49.0%; Score 24; DB 5; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPP 5
   |||||
Db 2 STSPP 6

RESULT 37
US-11-051-411-81
; Sequence 81, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
```

```
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 81
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-81

Query Match          49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
   |||||
Db 3 APPQH 7

RESULT 38
US-11-051-411-219
; Sequence 219, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 219
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-219

Query Match          49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
   |||||
Db 2 APPQH 6
```

```
RESULT 39
US-11-051-411-288
; Sequence 288, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; PRIOR FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 288
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-288

Query Match          49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 APPVH 7
Db      3 APPQH 7

RESULT 40
US-11-051-411-368
; Sequence 368, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; PRIOR FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 368
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-368

Query Match          49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 APPVH 7
Db      3 APPQH 7
```

```
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-368

Query Match          49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 APPVH 7
Db      1 APPQH 5

RESULT 41
US-11-051-411-544
; Sequence 544, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 544
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-544

Query Match          49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      3 APPVH 7
Db      1 APPQH 5

RESULT 42
US-11-051-411-557
; Sequence 557, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Celis, Esteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: Inducing Cellular Immune Responses To
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
```


FILE REFERENCE: 2060.0120000
CURRENT APPLICATION NUMBER: US/11/051,411
CURRENT FILING DATE: 2005-02-07
PRIOR APPLICATION NUMBER: US/09/458,297
PRIOR FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: US 09/017,735
PRIOR FILING DATE: 1998-02-03
PRIOR APPLICATION NUMBER: PCT/US99/13789
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 09/098,584
PRIOR FILING DATE: 1998-06-17
NUMBER OF SEQ ID NOS: 1492
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 557
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Peptide
US-11-051-411-557

Query Match 49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
|||
Db 3 APPQH 7

RESULT 43
US-11-051-411-733
Sequence 733, Application US/11051411
Publication No. US20050196403A1
GENERAL INFORMATION:
APPLICANT: Fikes, John
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Keogh, Elissa
TITLE OF INVENTION: Inducing Cellular Immune Responses To
FILE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
FILE REFERENCE: 2060.0120000
CURRENT APPLICATION NUMBER: US/11/051,411
CURRENT FILING DATE: 2005-02-07
PRIOR APPLICATION NUMBER: US/09/458,297
PRIOR FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: US 09/017,735
PRIOR FILING DATE: 1998-02-03
PRIOR APPLICATION NUMBER: PCT/US99/13789
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 09/098,584
PRIOR FILING DATE: 1998-06-17
NUMBER OF SEQ ID NOS: 1492
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 733
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Peptide
US-11-051-411-733

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Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
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Db 2 APPQH 6

RESULT 44
US-11-051-411-817
Sequence 817, Application US/11051411
Publication No. US20050196403A1
GENERAL INFORMATION:
APPLICANT: Fikes, John
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Keogh, Elissa
TITLE OF INVENTION: Inducing Cellular Immune Responses To
FILE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
FILE REFERENCE: 2060.0120000
CURRENT APPLICATION NUMBER: US/11/051,411
CURRENT FILING DATE: 2005-02-07
PRIOR APPLICATION NUMBER: US/09/458,297
PRIOR FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: US 09/017,735
PRIOR FILING DATE: 1998-02-03
PRIOR APPLICATION NUMBER: PCT/US99/13789
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 09/098,584
PRIOR FILING DATE: 1998-06-17
NUMBER OF SEQ ID NOS: 1492
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 817
LENGTH: 9
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic Peptide
US-11-051-411-817

Query Match 49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
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Db 5 APPQH 9

RESULT 45
US-11-051-411-939
Sequence 939, Application US/11051411
Publication No. US20050196403A1
GENERAL INFORMATION:
APPLICANT: Fikes, John
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Keogh, Elissa
TITLE OF INVENTION: Inducing Cellular Immune Responses To
FILE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
FILE REFERENCE: 2060.0120000
CURRENT APPLICATION NUMBER: US/11/051,411
CURRENT FILING DATE: 2005-02-07
PRIOR APPLICATION NUMBER: US/09/458,297
PRIOR FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: US 09/017,735
PRIOR FILING DATE: 1998-02-03
PRIOR APPLICATION NUMBER: PCT/US99/13789
PRIOR FILING DATE: 1999-06-17
PRIOR APPLICATION NUMBER: US 09/098,584
PRIOR FILING DATE: 1998-06-17
NUMBER OF SEQ ID NOS: 1492
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 939

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; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-939

Query Match 49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
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Db 2 APPQH 6

RESULT 46

US-11-051-411-998
; Sequence 998, Application US/11051411
; Publication No. US20050196403A1
; GENERAL INFORMATION:
; APPLICANT: Fikes, John
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Chesnut, Robert
; APPLICANT: Cellis, Eteban
; APPLICANT: Keogh, Elissa
; TITLE OF INVENTION: p53 Using Peptide And Nucleic Acid Compositions
; FILE REFERENCE: 2060.0120000
; CURRENT APPLICATION NUMBER: US/11/051,411
; CURRENT FILING DATE: 2005-02-07
; PRIOR APPLICATION NUMBER: US/09/458,297
; PRIOR FILING DATE: 1999-12-10
; PRIOR APPLICATION NUMBER: US 09/017,735
; PRIOR FILING DATE: 1998-02-03
; PRIOR APPLICATION NUMBER: PCT/US99/13789
; PRIOR FILING DATE: 1999-06-17
; PRIOR APPLICATION NUMBER: US 09/098,584
; PRIOR FILING DATE: 1998-06-17
; NUMBER OF SEQ ID NOS: 1492
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 998
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-11-051-411-998

Query Match 49.0%; Score 24; DB 6; Length 9;
Best Local Similarity 80.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPVH 7
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Db 5 APPQH 9

RESULT 47

US-09-972-035A-9
; Sequence 9, Application US/09972035A
; Patent No. US20020173622A1
; GENERAL INFORMATION:
; APPLICANT: Wettstein, Daniel A
; APPLICANT: Morham, Scott
; APPLICANT: Zavitz, Kenton
; TITLE OF INVENTION: Tsg101-GAGp6 INTERACTION AND USE THEREOF
; FILE REFERENCE: 1907.03
; CURRENT APPLICATION NUMBER: US/09/972,035A
; CURRENT FILING DATE: 2001-10-04
; PRIOR APPLICATION NUMBER: US 60/276,259

; PRIOR FILING DATE: 2001-03-14
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-09-972-035A-9

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Best Local Similarity 100.0%; Pred. No. 1.7e+06;
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QY 2 TAPP 5
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Db 2 TAPP 5

RESULT 48

US-10-223-172A-9
; Sequence 9, Application US/10223172A
; Publication No. US2003013844A1
; GENERAL INFORMATION:
; APPLICANT: Myriad Genetics, Inc.
; APPLICANT: Zavitz, Kenton, Daniel Albert
; APPLICANT: Wettstein, Daniel Albert
; APPLICANT: Morham, Scott
; APPLICANT: Hobden, Adrian
; TITLE OF INVENTION: COMPOSITION AND METHOD FOR TREATING HIV INFECTION
; FILE REFERENCE: 5003.01
; CURRENT APPLICATION NUMBER: US/10/223,172A
; CURRENT FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 60/313,239
; PRIOR FILING DATE: 2001-08-18
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 9
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-223-172A-9

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Best Local Similarity 100.0%; Pred. No. 1.7e+06;
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QY 2 TAPP 5
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Db 2 TAPP 5

RESULT 49

US-10-224-999A-9
; Sequence 9, Application US/10224999A
; Publication No. US20030171318A1
; GENERAL INFORMATION:
; APPLICANT: Myriad Genetics, Inc.
; APPLICANT: Morham, Scott
; APPLICANT: Zavitz, Kenton
; APPLICANT: Hobden, Adrian
; TITLE OF INVENTION: Composition and Method for Treating Viral Infection
; FILE REFERENCE: 5004.01
; CURRENT APPLICATION NUMBER: US/10/224,999A
; CURRENT FILING DATE: 2003-03-03
; PRIOR APPLICATION NUMBER: US 60/313,695
; PRIOR FILING DATE: 2001-08-20
; NUMBER OF SEQ ID NOS: 3484
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; SEQ ID NO 9
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; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-224-999A-9

Query Match 46.9%; Score 23; DB 4; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
DB 2 TAPP 5

RESULT 50
US-10-663-407-9
; Sequence 9, Application US/10663407
; Publication NO. US20040109861A1
; GENERAL INFORMATION:
; APPLICANT: Myriad Genetics, Incorporated
; APPLICANT: Wettstein, Daniel A
; APPLICANT: Morham, Scott
; APPLICANT: Zavitz, Kenton
; TITLE OF INVENTION: TSG101-GAG INTERACTION AND USE THEREOF
; FILE REFERENCE: 1907.04-1
; CURRENT APPLICATION NUMBER: US/10/663,407
; CURRENT FILING DATE: 2003-09-15
; PRIOR APPLICATION NUMBER: PCT/US02/08146
; PRIOR FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: US 10/223,172
; PRIOR FILING DATE: 2002-08-19
; PRIOR APPLICATION NUMBER: US 10/224,999
; PRIOR FILING DATE: 2002-08-20
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
; LENGTH: 5
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-663-407-9

Query Match 46.9%; Score 23; DB 4; Length 5;
Best Local Similarity 100.0%; Pred. No. 1.7e+06;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
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OM protein - protein search, using sw model

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Title: US-10-019-513-1
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Sequence: 1 STAPPVHV 9

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Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 111694

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Post-processing: Minimum Match 0%
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Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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107	20	40.8	5	1	US-08-477-509B-3	Sequence 3, Appl	180	19	38.8	8	2	US-08-444-818-343	Sequence 343, Appl
108	20	40.8	5	2	US-08-482-085B-3	Sequence 3, Appl	181	19	38.8	8	2	US-08-444-818-676	Sequence 676, Appl
109	20	40.8	5	2	US-09-444-751A-3	Sequence 3, Appl	182	19	38.8	8	2	US-09-100-930A-19	Sequence 19, Appl
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111	20	40.8	5	2	US-08-897-556A-4	Sequence 4, Appl	184	19	38.8	8	2	US-09-314-268-22	Sequence 22, Appl
112	20	40.8	5	2	US-09-547-693-4	Sequence 4, Appl	185	19	38.8	8	2	US-09-314-268-23	Sequence 23, Appl
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116	20	40.8	6	2	US-09-577-528B-24	Sequence 24, Appl	189	19	38.8	8	2	US-08-695-692B-21	Sequence 21, Appl
117	20	40.8	6	2	US-10-208-557-24	Sequence 24, Appl	190	19	38.8	8	2	US-09-239-043D-8	Sequence 8, Appl
118	20	40.8	6	2	US-10-317-252B-403	Sequence 403, App	191	19	38.8	8	2	US-09-239-043D-201	Sequence 201, App
119	20	40.8	7	1	US-08-472-453-57	Sequence 57, Appl	192	19	38.8	8	2	US-09-239-043D-1326	Sequence 1326, App
120	20	40.8	7	2	US-08-301-435-62	Sequence 62, Appl	193	19	38.8	8	2	US-09-437-136-6	Sequence 6, Appl
121	20	40.8	7	2	US-09-731-242A-22	Sequence 22, Appl	194	19	38.8	8	2	US-09-693-746-165	Sequence 165, App
122	20	40.8	7	4	PCT-US95-10904-62	Sequence 62, Appl	195	19	38.8	8	2	US-10-181-546-1	Sequence 1, Appl
123	20	40.8	8	2	US-08-444-818-339	Sequence 33, App	196	19	38.8	8	2	US-09-788-308E-4	Sequence 4, Appl
124	20	40.8	9	1	US-08-417-174-14	Sequence 14, Appl	197	19	38.8	8	2	US-10-655-201-6	Sequence 6, Appl
125	20	40.8	9	1	US-08-231-565A-14	Sequence 14, Appl	198	19	38.8	8	4	PCT-US93-04754-7	Sequence 7, Appl
126	20	40.8	9	1	US-09-007-961-14	Sequence 14, Appl	199	19	38.8	8	6	5171845-8	Patent No. 5171845
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129	20	40.8	9	2	US-09-042-107-249	Sequence 24, App	202	19	38.8	9	1	US-08-214-650-43	Sequence 43, Appl
130	20	40.8	9	2	US-09-267-439-14	Sequence 14, Appl	203	19	38.8	9	1	US-08-615-181-18	Sequence 18, Appl
131	20	40.8	9	2	US-09-073-138-14	Sequence 14, Appl	204	19	38.8	9	1	US-08-615-181-96	Sequence 96, Appl
132	20	40.8	9	2	US-09-722-258D-249	Sequence 249, App	205	19	38.8	9	1	US-08-290-268-17	Sequence 17, Appl
133	20	40.8	9	2	US-09-676-475A-249	Sequence 249, App	206	19	38.8	9	1	US-08-340-283-18	Sequence 18, Appl
134	20	40.8	9	2	US-09-935-430-7	Sequence 7, Appl	207	19	38.8	9	1	US-08-340-283-144	Sequence 144, App
135	20	40.8	9	2	US-09-657-276-1346	Sequence 1346, Ap	208	19	38.8	9	1	US-08-146-028-447	Sequence 447, App
136	20	40.8	9	2	US-09-716-964B-9	Sequence 9, Appl	209	19	38.8	9	1	US-08-146-028-448	Sequence 448, App
137	20	40.8	9	2	US-10-607-595-249	Sequence 249, App	210	19	38.8	9	1	US-08-146-028-449	Sequence 449, App
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139	20	40.8	5	2	US-09-006-428A-22	Sequence 22, Appl	212	19	38.8	9	1	US-08-146-028-451	Sequence 451, App
140	19	38.8	5	2	US-08-433-441A-8	Sequence 8, Appl	213	19	38.8	9	1	US-08-146-028-452	Sequence 452, App
141	19	38.8	5	2	US-08-433-441A-9	Sequence 9, Appl	214	19	38.8	9	1	US-08-350-260A-480	Sequence 480, App
142	19	38.8	5	2	US-09-615-387C-22	Sequence 22, Appl	215	19	38.8	9	2	US-08-723-425A-447	Sequence 447, App
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144	19	38.8	5	2	US-08-089-994A-9	Sequence 9, Appl	217	19	38.8	9	2	US-08-723-425A-449	Sequence 449, App
145	19	38.8	6	1	US-08-078-812-134	Sequence 134, App	218	19	38.8	9	2	US-08-723-425A-450	Sequence 450, App
146	19	38.8	6	1	US-08-487-006-49	Sequence 49, Appl	219	19	38.8	9	2	US-08-723-425A-451	Sequence 451, App
147	19	38.8	6	1	US-08-488-659A-49	Sequence 49, Appl	220	19	38.8	9	2	US-08-723-425A-452	Sequence 452, App
148	19	38.8	6	2	US-08-134-198E-26	Sequence 26, Appl	221	19	38.8	9	2	US-09-112-206-447	Sequence 447, App
149	19	38.8	6	2	US-09-636-252A-15	Sequence 15, Appl	222	19	38.8	9	2	US-09-112-206-448	Sequence 448, App
150	19	38.8	6	2	US-09-006-428A-21	Sequence 21, Appl	223	19	38.8	9	2	US-09-112-206-449	Sequence 449, App
151	19	38.8	6	2	US-09-615-387C-21	Sequence 21, Appl	224	19	38.8	9	2	US-09-112-206-450	Sequence 450, App
152	19	38.8	6	2	US-09-657-276-1217	Sequence 1217, Ap	225	19	38.8	9	2	US-09-112-206-451	Sequence 451, App
153	19	38.8	6	2	US-09-788-308E-1	Sequence 1, Appl	226	19	38.8	9	2	US-09-112-206-452	Sequence 452, App
154	19	38.8	6	2	US-10-317-252B-392	Sequence 392, App	227	19	38.8	9	2	US-09-227-357-312	Sequence 312, App
155	19	38.8	6	2	US-10-317-252B-393	Sequence 393, App	228	19	38.8	9	2	US-09-023-905A-20	Sequence 20, Appl
156	19	38.8	6	2	PCT-US94-07605-9	Sequence 9, Appl	229	19	38.8	9	2	US-09-023-905A-38	Sequence 38, Appl
157	19	38.8	6	4	US-08-201-046A-12	Sequence 12, Appl	230	19	38.8	9	2	US-09-104-337A-480	Sequence 480, App
158	19	38.8	7	1	US-08-545-228-1	Sequence 1, Appl	231	19	38.8	9	2	US-09-311-784A-370	Sequence 370, App
159	19	38.8	7	1	US-08-666-473-28	Sequence 28, Appl	232	19	38.8	9	2	US-09-311-784A-404	Sequence 404, App
160	19	38.8	7	1	US-08-567-357A-23	Sequence 23, Appl	233	19	38.8	9	2	US-09-344-040C-20	Sequence 20, Appl
161	19	38.8	7	2	US-08-946-329A-23	Sequence 23, Appl	234	19	38.8	9	2	US-08-801-405B-4	Sequence 4, Appl
162	19	38.8	7	2	US-08-729-743A-23	Sequence 23, Appl	235	19	38.8	9	2	US-09-508-930D-14	Sequence 14, Appl
163	19	38.8	7	2	US-09-084-605B-12	Sequence 12, Appl	236	19	38.8	9	2	US-09-790-497A-395	Sequence 395, App
164	19	38.8	7	2	US-09-084-605B-27	Sequence 27, Appl	237	19	38.8	9	2	US-09-790-497A-396	Sequence 396, App
165	19	38.8	7	2	US-09-794-960-6	Sequence 6, Appl	238	19	38.8	9	2	US-09-790-497A-397	Sequence 397, App
166	19	38.8	7	2	US-09-508-930D-11	Sequence 11, Appl	239	19	38.8	9	2	US-09-790-497A-398	Sequence 398, App
167	19	38.8	7	2	US-09-562-914-23	Sequence 23, Appl	240	19	38.8	9	2	US-09-790-497A-399	Sequence 399, App
168	19	38.8	7	2	US-07-626-589-12	Sequence 12, Appl	241	19	38.8	9	2	US-09-790-497A-400	Sequence 400, App
169	19	38.8	8	1	US-08-072-063-7	Sequence 7, Appl	242	19	38.8	9	2	US-09-790-497A-576	Sequence 576, App
170	19	38.8	8	1	US-08-323-444A-5	Sequence 5, Appl	243	19	38.8	9	2	US-09-576-824A-395	Sequence 395, App
171	19	38.8	8	1	US-08-236-410-12	Sequence 12, Appl	244	19	38.8	9	2	US-09-576-824A-396	Sequence 396, App
172	19	38.8	8	1			245	19	38.8	9	2	US-09-576-824A-397	Sequence 397, App
173	19	38.8	8	1			246	19	38.8	9	2	US-09-576-824A-398	Sequence 398, App

247	19	38.8	9	2	US-09-576-824A-399	Sequence 399, App	320	18	36.7	5	2	US-09-823-240A-4	Sequence 4, Appli
248	19	38.8	9	2	US-09-576-824A-400	Sequence 400, App	321	18	36.7	5	2	US-09-095-639A-1	Sequence 1, Appli
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250	19	38.8	9	2	US-09-239-043D-541	Sequence 541, App	323	18	36.7	5	2	US-10-346-927-27	Sequence 27, Appli
251	19	38.8	9	2	US-09-239-043D-1350	Sequence 1350, Ap	324	18	36.7	5	2	US-10-346-927-85	Sequence 85, Appli
252	19	38.8	9	2	US-08-239-043D-1779	Sequence 1779, Ap	325	18	36.7	5	4	PCT-US94-01840-13	Sequence 13, Appli
253	19	38.8	9	2	US-09-239-043D-1831	Sequence 1831, Ap	326	18	36.7	5	4	PCT-US94-02552-12	Sequence 12, Appli
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256	19	38.8	9	2	US-09-680-497-449	Sequence 449, App	329	18	36.7	6	1	US-08-171-737-18	Sequence 18, Appli
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272	19	38.8	9	2	US-08-641-808-14	Sequence 14, Appli	345	18	36.7	6	1	US-08-472-453-20	Sequence 40, Appli
273	19	38.8	4	1	US-08-544-143A-22	Sequence 22, Appli	346	18	36.7	6	1	US-08-472-453-42	Sequence 42, Appli
274	18	36.7	4	1	US-08-477-509B-12	Sequence 12, Appli	347	18	36.7	6	1	US-08-472-453-50	Sequence 50, Appli
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276	18	36.7	4	2	US-08-904-760B-24	Sequence 24, Appli	349	18	36.7	6	1	US-08-292-597-64	Sequence 64, Appli
277	18	36.7	4	2	US-09-444-791A-12	Sequence 12, Appli	350	18	36.7	6	1	US-08-222-715B-16	Sequence 16, Appli
278	18	36.7	4	2	US-09-547-693-178	Sequence 178, App	351	18	36.7	6	1	US-08-666-473-108	Sequence 108, App
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280	18	36.7	4	2	US-09-095-639A-7	Sequence 7, Appli	353	18	36.7	6	1	US-08-388-653-64	Sequence 64, Appli
281	18	36.7	4	2	US-08-825-561A-70	Sequence 70, Appli	354	18	36.7	6	1	US-08-473-985-64	Sequence 64, Appli
282	18	36.7	4	2	US-10-185-815A-99	Sequence 99, Appli	355	18	36.7	6	1	US-08-612-842-37	Sequence 37, Appli
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290	18	36.7	5	1	US-08-592-294-1	Sequence 1, Appli	363	18	36.7	6	2	US-09-156-855-64	Sequence 64, Appli
291	18	36.7	5	1	US-08-454-859-1	Sequence 1, Appli	364	18	36.7	6	2	US-08-819-101-11	Sequence 11, Appli
292	18	36.7	5	1	US-08-472-453-27	Sequence 27, Appli	365	18	36.7	6	2	US-08-904-760B-26	Sequence 26, Appli
293	18	36.7	5	1	US-08-666-473-6	Sequence 6, Appli	366	18	36.7	6	2	US-08-158-010-64	Sequence 64, Appli
294	18	36.7	5	1	US-08-666-473-10	Sequence 10, Appli	367	18	36.7	6	2	US-09-087-647-64	Sequence 64, Appli
295	18	36.7	5	1	US-08-340-283-3	Sequence 3, Appli	368	18	36.7	6	2	US-08-602-999A-249	Sequence 249, App
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297	18	36.7	5	1	US-08-967-508-12	Sequence 12, Appli	370	18	36.7	6	2	US-09-302-629-64	Sequence 64, Appli
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299	18	36.7	5	2	US-08-915-189-27	Sequence 27, Appli	372	18	36.7	6	2	US-09-500-124-249	Sequence 249, App
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302	18	36.7	5	2	US-08-972-760-85	Sequence 85, Appli	375	18	36.7	6	2	US-09-551-737C-15	Sequence 15, Appli
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309	18	36.7	5	2	US-09-503-998-85	Sequence 85, Appli	382	18	36.7	6	2	US-09-547-693-171	Sequence 171, App
310	18	36.7	5	2	US-09-444-791A-13	Sequence 13, Appli	383	18	36.7	6	2	US-09-790-497A-443	Sequence 443, App
311	18	36.7	5	2	US-09-373-694-27	Sequence 27, Appli	384	18	36.7	6	2	US-09-790-497A-598	Sequence 598, App
312	18	36.7	5	2	US-09-436-874-11	Sequence 11, Appli	385	18	36.7	6	2	US-09-428-082B-324	Sequence 324, App
313	18	36.7	5	2	US-09-119-507B-6	Sequence 6, Appli	386	18	36.7	6	2	US-09-576-824A-443	Sequence 443, App
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318	18	36.7	5	2	US-08-877-605-294	Sequence 294, App	391	18	36.7	6	2	US-09-454-651B-27	Sequence 27, Appli
319	18	36.7	5	2	US-09-547-693-6	Sequence 6, Appli	392	18	36.7	6	2	US-09-454-651B-31	Sequence 31, Appli

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394	18	36.7	6	2	US-09-641-801-13	Sequence 13, Appl	467	18	36.7	7	2	US-09-493-940-41	Sequence 41, Appl
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396	18	36.7	6	2	US-10-078-547-19	Sequence 19, Appl	469	18	36.7	7	2	US-09-520-254-8	Sequence 8, Appl
397	18	36.7	6	2	US-10-281-652-13	Sequence 13, Appl	470	18	36.7	7	2	US-09-551-738B-13	Sequence 9, Appl
398	18	36.7	6	2	US-09-688-017-131	Sequence 131, App	471	18	36.7	7	2	US-09-551-738B-13	Sequence 13, Appl
399	18	36.7	7	1	US-07-989-290-3	Sequence 3, Appl	472	18	36.7	7	2	US-09-599-287A-26	Sequence 26, Appl
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401	18	36.7	7	1	US-08-271-698-3	Sequence 3, Appl	474	18	36.7	7	2	US-09-931-552-36	Sequence 36, Appl
402	18	36.7	7	1	US-08-151-219-3	Sequence 3, Appl	475	18	36.7	7	2	US-08-861-153A-48	Sequence 48, Appl
403	18	36.7	7	1	US-08-468-596-3	Sequence 3, Appl	476	18	36.7	7	2	US-09-731-242A-19	Sequence 19, Appl
404	18	36.7	7	1	US-08-188-223-10	Sequence 10, Appl	477	18	36.7	7	2	US-09-731-242A-21	Sequence 21, Appl
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412	18	36.7	7	1	US-08-472-453-18	Sequence 38, Appl	485	18	36.7	7	2	US-09-688-017-132	Sequence 132, App
413	18	36.7	7	1	US-08-472-453-39	Sequence 39, Appl	486	18	36.7	7	2	US-09-902-481B-12	Sequence 12, Appl
414	18	36.7	7	1	US-08-472-453-41	Sequence 41, Appl	487	18	36.7	7	2	US-09-902-481B-13	Sequence 13, Appl
415	18	36.7	7	1	US-08-472-453-49	Sequence 49, Appl	488	18	36.7	7	4	PCT-US94-01840-11	Sequence 11, Appl
416	18	36.7	7	1	US-08-472-453-54	Sequence 54, Appl	489	18	36.7	7	4	PCT-US94-01840-11	Sequence 3, Appl
417	18	36.7	7	1	US-08-472-453-55	Sequence 55, Appl	490	18	36.7	7	6	5194592-72	Patent No. 5194592
418	18	36.7	7	1	US-08-472-453-56	Sequence 56, Appl	491	18	36.7	8	1	US-07-989-290-4	Sequence 4, Appl
419	18	36.7	7	1	US-08-666-473-7	Sequence 7, Appl	492	18	36.7	8	1	US-08-271-698-4	Sequence 4, Appl
420	18	36.7	7	1	US-08-666-473-109	Sequence 109, App	493	18	36.7	8	1	US-08-210-266A-6	Sequence 6, Appl
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422	18	36.7	7	1	US-08-893-853-50	Sequence 50, Appl	495	18	36.7	8	1	US-08-266-514-14	Sequence 14, Appl
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427	18	36.7	7	2	US-08-944-479-9	Sequence 9, Appl	500	18	36.7	8	1	US-08-688-675-6	Sequence 6, Appl
428	18	36.7	7	2	US-08-817-547A-25	Sequence 25, Appl	501	18	36.7	8	1	US-08-592-294-2	Sequence 2, Appl
429	18	36.7	7	2	US-08-207-575A-17	Sequence 17, Appl	502	18	36.7	8	1	US-08-666-473-86	Sequence 86, Appl
430	18	36.7	7	2	US-08-771-986A-13	Sequence 13, Appl	503	18	36.7	8	1	US-08-955-263-4	Sequence 4, Appl
431	18	36.7	7	2	US-08-819-101-6	Sequence 6, Appl	504	18	36.7	8	1	US-08-654-604-14	Sequence 14, Appl
432	18	36.7	7	2	US-08-819-101-8	Sequence 8, Appl	505	18	36.7	8	1	US-08-654-604-15	Sequence 15, Appl
433	18	36.7	7	2	US-08-819-101-9	Sequence 9, Appl	506	18	36.7	8	1	US-08-997-080-19	Sequence 19, Appl
434	18	36.7	7	2	US-08-904-760B-27	Sequence 27, Appl	507	18	36.7	8	1	US-08-845-742-9	Sequence 9, Appl
435	18	36.7	7	2	US-08-469-141A-50	Sequence 50, Appl	508	18	36.7	8	1	US-08-612-842-39	Sequence 39, Appl
436	18	36.7	7	2	US-09-330-095-5	Sequence 5, Appl	509	18	36.7	8	1	US-08-312-202B-12	Sequence 12, Appl
437	18	36.7	7	2	US-08-968-466-10	Sequence 10, Appl	510	18	36.7	8	1	US-08-957-362-19	Sequence 19, Appl
438	18	36.7	7	2	US-09-113-921-50	Sequence 50, Appl	511	18	36.7	8	2	US-08-873-970-19	Sequence 19, Appl
439	18	36.7	7	2	US-08-640-737-35	Sequence 35, Appl	512	18	36.7	8	2	US-08-477-860C-6	Sequence 6, Appl
440	18	36.7	7	2	US-09-103-478-5	Sequence 5, Appl	513	18	36.7	8	2	US-08-817-547A-24	Sequence 24, Appl
441	18	36.7	7	2	US-09-103-478-17	Sequence 17, Appl	514	18	36.7	8	2	US-08-246-441-8	Sequence 8, Appl
442	18	36.7	7	2	US-09-001-984C-15	Sequence 15, Appl	515	18	36.7	8	2	US-09-079-347-12	Sequence 12, Appl
443	18	36.7	7	2	US-09-211-013-1	Sequence 1, Appl	516	18	36.7	8	2	US-08-444-818-541	Sequence 541, App
444	18	36.7	7	2	US-09-211-013-2	Sequence 2, Appl	517	18	36.7	8	2	US-08-444-818-542	Sequence 542, App
445	18	36.7	7	2	US-09-211-013-3	Sequence 3, Appl	518	18	36.7	8	2	US-08-444-818-543	Sequence 543, App
446	18	36.7	7	2	US-09-211-013-4	Sequence 4, Appl	519	18	36.7	8	2	US-08-444-818-544	Sequence 544, App
447	18	36.7	7	2	US-09-211-013-5	Sequence 5, Appl	520	18	36.7	8	2	US-08-444-818-545	Sequence 545, App
448	18	36.7	7	2	US-09-461-697-298	Sequence 298, App	521	18	36.7	8	2	US-08-444-818-546	Sequence 546, App
449	18	36.7	7	2	US-08-343-011B-8	Sequence 8, Appl	522	18	36.7	8	2	US-09-055-855-19	Sequence 19, Appl
450	18	36.7	7	2	US-08-478-546B-10	Sequence 10, Appl	523	18	36.7	8	2	US-08-973-914-7	Sequence 7, Appl
451	18	36.7	7	2	US-09-193-931C-5	Sequence 5, Appl	524	18	36.7	8	2	US-08-705-347A-19	Sequence 19, Appl
452	18	36.7	7	2	US-09-193-931C-17	Sequence 17, Appl	525	18	36.7	8	2	US-08-973-131-61	Sequence 61, Appl
453	18	36.7	7	2	US-09-305-984-41	Sequence 41, Appl	526	18	36.7	8	2	US-09-324-542-19	Sequence 19, Appl
454	18	36.7	7	2	US-09-438-150-5	Sequence 5, Appl	527	18	36.7	8	2	US-09-205-426-19	Sequence 19, Appl
455	18	36.7	7	2	US-09-295-936B-13	Sequence 13, Appl	528	18	36.7	8	2	US-09-200-643-19	Sequence 19, Appl
456	18	36.7	7	2	US-09-073-541A-41	Sequence 41, Appl	529	18	36.7	8	2	US-09-295-996B-10	Sequence 10, Appl
457	18	36.7	7	2	US-09-396-347F-15	Sequence 15, Appl	530	18	36.7	8	2	US-09-295-996B-14	Sequence 14, Appl
458	18	36.7	7	2	US-09-451-067-50	Sequence 50, Appl	531	18	36.7	8	2	US-08-469-260A-491	Sequence 491, App
459	18	36.7	7	2	US-09-026-221-5	Sequence 5, Appl	532	18	36.7	8	2	US-09-393-585-8	Sequence 8, Appl
460	18	36.7	7	2	US-09-026-221-17	Sequence 17, Appl	533	18	36.7	8	2	US-09-422-375-9	Sequence 9, Appl
461	18	36.7	7	2	US-09-076-372-3	Sequence 3, Appl	534	18	36.7	8	2	US-08-488-446-491	Sequence 491, App
462	18	36.7	7	2	US-09-295-846B-16	Sequence 16, Appl	535	18	36.7	8	2	US-09-295-846B-13	Sequence 13, Appl
463	18	36.7	7	2	US-09-551-737C-16	Sequence 16, Appl	536	18	36.7	8	2	US-09-551-737C-13	Sequence 13, Appl
464	18	36.7	7	2	US-09-295-924B-3	Sequence 3, Appl	537	18	36.7	8	2	US-09-551-737C-13	Sequence 13, Appl
465	18	36.7	7	2	US-08-845-381E-5	Sequence 5, Appl	538	18	36.7	8	2	US-09-551-737C-17	Sequence 17, Appl

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540	18	36.7	8	2	US-09-295-924B-4	Sequence 4, Appl	613	18	36.7	9	2	US-08-817-547A-23	Sequence 23, Appl
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543	18	36.7	8	2	US-08-475-955-195	Sequence 195, App	616	18	36.7	9	2	US-08-723-425A-433	Sequence 433, App
544	18	36.7	8	2	US-08-475-955-196	Sequence 196, App	617	18	36.7	9	2	US-08-723-425A-434	Sequence 434, App
545	18	36.7	8	2	US-08-475-955-197	Sequence 197, App	618	18	36.7	9	2	US-08-723-425A-435	Sequence 435, App
546	18	36.7	8	2	US-08-475-955-198	Sequence 198, App	619	18	36.7	9	2	US-08-723-425A-436	Sequence 436, App
547	18	36.7	8	2	US-08-475-955-199	Sequence 199, App	620	18	36.7	9	2	US-08-723-425A-437	Sequence 437, App
548	18	36.7	8	2	US-08-475-955-200	Sequence 200, App	621	18	36.7	9	2	US-08-723-425A-438	Sequence 438, App
549	18	36.7	8	2	US-08-475-955-201	Sequence 201, App	622	18	36.7	9	2	US-08-723-425A-439	Sequence 439, App
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551	18	36.7	8	2	US-09-576-824A-598	Sequence 598, App	624	18	36.7	9	2	US-09-113-921-22	Sequence 22, Appl
552	18	36.7	8	2	US-09-245-764-4	Sequence 4, Appl	625	18	36.7	9	2	US-09-112-206-433	Sequence 433, App
553	18	36.7	8	2	US-09-239-043D-397	Sequence 397, App	626	18	36.7	9	2	US-09-112-206-434	Sequence 434, App
554	18	36.7	8	2	US-09-239-043D-908	Sequence 908, App	627	18	36.7	9	2	US-09-112-206-435	Sequence 435, App
555	18	36.7	8	2	US-09-239-043D-1109	Sequence 1109, App	628	18	36.7	9	2	US-09-112-206-436	Sequence 436, App
556	18	36.7	8	2	US-08-424-550B-491	Sequence 491, App	629	18	36.7	9	2	US-09-112-206-437	Sequence 437, App
557	18	36.7	8	2	US-09-211-715-166	Sequence 166, App	630	18	36.7	9	2	US-09-112-206-438	Sequence 438, App
558	18	36.7	8	2	US-10-062-623B-28	Sequence 28, Appl	631	18	36.7	9	2	US-09-112-206-439	Sequence 439, App
559	18	36.7	8	2	US-07-867-819D-110	Sequence 110, App	632	18	36.7	9	2	US-09-112-206-453	Sequence 453, App
560	18	36.7	8	2	US-07-867-819D-111	Sequence 111, App	633	18	36.7	9	2	US-08-441-943-34	Sequence 34, Appl
561	18	36.7	8	2	US-07-867-819D-142	Sequence 142, App	634	18	36.7	9	2	US-08-348-952A-5	Sequence 5, Appl
562	18	36.7	8	2	US-07-867-819D-143	Sequence 143, App	635	18	36.7	9	2	US-09-001-984C-17	Sequence 17, Appl
563	18	36.7	8	2	US-07-867-819D-144	Sequence 144, App	636	18	36.7	9	2	US-09-267-439-13	Sequence 13, Appl
564	18	36.7	8	2	US-07-867-819D-145	Sequence 145, App	637	18	36.7	9	2	US-09-105-839D-52	Sequence 52, Appl
565	18	36.7	8	2	US-07-867-819D-146	Sequence 146, App	638	18	36.7	9	2	US-09-105-839D-65	Sequence 65, Appl
566	18	36.7	8	2	US-09-756-283A-54	Sequence 54, Appl	639	18	36.7	9	2	US-08-997-802-10	Sequence 10, Appl
567	18	36.7	8	2	US-09-688-017-133	Sequence 133, App	640	18	36.7	9	2	US-08-997-802-11	Sequence 11, Appl
568	18	36.7	8	2	US-08-768-350B-57	Sequence 57, Appl	641	18	36.7	9	2	US-08-669-656A-20	Sequence 20, Appl
569	18	36.7	9	1	US-08-171-737-9	Sequence 9, Appl	642	18	36.7	9	2	US-09-461-325-386	Sequence 386, App
570	18	36.7	9	1	US-08-178-570-59	Sequence 59, Appl	643	18	36.7	9	2	US-09-087-031E-6	Sequence 6, Appl
571	18	36.7	9	1	US-08-279-155-1	Sequence 1, Appl	644	18	36.7	9	2	US-09-396-347F-17	Sequence 17, Appl
572	18	36.7	9	1	US-08-279-155-38	Sequence 38, Appl	645	18	36.7	9	2	US-09-451-067-23	Sequence 23, Appl
573	18	36.7	9	1	US-08-615-181-29	Sequence 29, Appl	646	18	36.7	9	2	US-08-311-784A-339	Sequence 339, App
574	18	36.7	9	1	US-08-615-181-91	Sequence 91, Appl	647	18	36.7	9	2	US-09-073-138-13	Sequence 13, Appl
575	18	36.7	9	1	US-08-615-181-97	Sequence 97, Appl	648	18	36.7	9	2	US-09-344-040C-86	Sequence 86, Appl
576	18	36.7	9	1	US-08-703-988A-1	Sequence 1, Appl	649	18	36.7	9	2	US-09-344-040C-107	Sequence 107, App
577	18	36.7	9	1	US-08-703-988A-38	Sequence 38, Appl	650	18	36.7	9	2	US-09-812-079A-11	Sequence 11, Appl
578	18	36.7	9	1	US-08-592-294-3	Sequence 3, Appl	651	18	36.7	9	2	US-09-295-924B-9	Sequence 9, Appl
579	18	36.7	9	1	US-08-408-604A-87	Sequence 87, Appl	652	18	36.7	9	2	US-09-543-608A-22	Sequence 22, Appl
580	18	36.7	9	1	US-08-454-859-2	Sequence 2, Appl	653	18	36.7	9	2	US-10-012-542-386	Sequence 386, App
581	18	36.7	9	1	US-08-666-473-111	Sequence 111, App	654	18	36.7	9	2	US-09-790-497A-381	Sequence 381, App
582	18	36.7	9	1	US-08-666-473-112	Sequence 112, App	655	18	36.7	9	2	US-09-790-497A-382	Sequence 382, App
583	18	36.7	9	1	US-08-244-951A-7	Sequence 7, Appl	656	18	36.7	9	2	US-09-790-497A-383	Sequence 383, App
584	18	36.7	9	1	US-08-417-174-13	Sequence 13, Appl	657	18	36.7	9	2	US-09-790-497A-384	Sequence 384, App
585	18	36.7	9	1	US-08-765-179B-17	Sequence 17, Appl	658	18	36.7	9	2	US-09-790-497A-385	Sequence 385, App
586	18	36.7	9	1	US-07-828-789-4	Sequence 4, Appl	659	18	36.7	9	2	US-09-790-497A-386	Sequence 386, App
587	18	36.7	9	1	US-07-828-789-12	Sequence 12, Appl	660	18	36.7	9	2	US-09-790-497A-387	Sequence 387, App
588	18	36.7	9	1	US-08-389-011-5	Sequence 5, Appl	661	18	36.7	9	2	US-09-790-497A-401	Sequence 401, App
589	18	36.7	9	1	US-08-340-283-11	Sequence 11, Appl	662	18	36.7	9	2	US-09-790-497A-566	Sequence 566, App
590	18	36.7	9	1	US-08-340-283-13	Sequence 13, Appl	663	18	36.7	9	2	US-09-790-497A-567	Sequence 567, App
591	18	36.7	9	1	US-08-340-283-13	Sequence 13, Appl	664	18	36.7	9	2	US-09-790-497A-568	Sequence 568, App
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593	18	36.7	9	1	US-08-231-565A-13	Sequence 13, App	666	18	36.7	9	2	US-09-790-497A-570	Sequence 570, App
594	18	36.7	9	1	US-08-146-028-433	Sequence 433, App	667	18	36.7	9	2	US-09-790-497A-571	Sequence 571, App
595	18	36.7	9	1	US-08-146-028-434	Sequence 434, App	668	18	36.7	9	2	US-09-576-824A-381	Sequence 381, App
596	18	36.7	9	1	US-08-146-028-435	Sequence 435, App	669	18	36.7	9	2	US-09-576-824A-382	Sequence 382, App
597	18	36.7	9	1	US-08-146-028-436	Sequence 436, App	670	18	36.7	9	2	US-09-576-824A-383	Sequence 383, App
598	18	36.7	9	1	US-08-146-028-437	Sequence 437, App	671	18	36.7	9	2	US-09-576-824A-384	Sequence 384, App
599	18	36.7	9	1	US-08-146-028-438	Sequence 438, App	672	18	36.7	9	2	US-09-576-824A-385	Sequence 385, App
600	18	36.7	9	1	US-08-146-028-439	Sequence 439, App	673	18	36.7	9	2	US-09-576-824A-386	Sequence 386, App
601	18	36.7	9	1	US-08-146-028-440	Sequence 440, App	674	18	36.7	9	2	US-09-576-824A-387	Sequence 387, App
602	18	36.7	9	1	US-08-146-028-453	Sequence 453, App	675	18	36.7	9	2	US-09-576-824A-401	Sequence 401, App
603	18	36.7	9	1	US-08-893-853-56	Sequence 56, Appl	676	18	36.7	9	2	US-09-833-039A-86	Sequence 86, Appl
604	18	36.7	9	1	US-08-893-853-57	Sequence 57, Appl	677	18	36.7	9	2	US-09-833-039A-107	Sequence 107, App
605	18	36.7	9	1	US-08-742-440A-17	Sequence 17, Appl	678	18	36.7	9	2	US-09-769-180-31	Sequence 31, Appl
606	18	36.7	9	1	US-08-742-440A-23	Sequence 23, Appl	679	18	36.7	9	2	US-09-769-180-32	Sequence 32, Appl
607	18	36.7	9	1	US-08-612-842-1	Sequence 1, Appl	680	18	36.7	9	2	US-09-769-180-33	Sequence 33, Appl
608	18	36.7	9	1	US-08-612-842-38	Sequence 38, Appl	681	18	36.7	9	2	US-09-769-180-34	Sequence 34, Appl
609	18	36.7	9	1	US-08-986-234-77	Sequence 77, Appl	682	18	36.7	9	2	US-09-239-043D-398	Sequence 398, App
610	18	36.7	9	1	US-09-007-961-13	Sequence 13, Appl	683	18	36.7	9	2	US-09-239-043D-414	Sequence 414, App
611	18	36.7	9	2	US-09-369-643-59	Sequence 59, Appl	684	18	36.7	9	2	US-09-239-043D-923	Sequence 923, App

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686	18	36.7	9	2	US-09-239-043D-2344	Sequence 2344, Ap	759	17	34.7	7	2	US-09-731-242A-17	Sequence 17, Appl
687	18	36.7	9	2	US-09-239-043D-2403	Sequence 2403, Ap	760	17	34.7	7	2	US-09-731-242A-20	Sequence 20, Appl
688	18	36.7	9	2	US-09-680-497-433	Sequence 433, Ap	761	17	34.7	7	2	US-10-042-991-1	Sequence 1, Appl
689	18	36.7	9	2	US-09-680-497-434	Sequence 434, Ap	762	17	34.7	7	2	US-09-723-257-50	Sequence 50, Appl
690	18	36.7	9	2	US-09-680-497-435	Sequence 435, Ap	763	17	34.7	7	2	US-10-038-937-8	Sequence 8, Appl
691	18	36.7	9	2	US-09-680-497-436	Sequence 436, Ap	764	17	34.7	7	2	US-10-007-747-8	Sequence 8, Appl
692	18	36.7	9	2	US-09-680-497-437	Sequence 437, Ap	765	17	34.7	7	2	US-09-884-767A-104	Sequence 104, App
693	18	36.7	9	2	US-09-680-497-438	Sequence 438, Ap	766	17	34.7	7	2	US-09-772-819-4	Sequence 44, Appl
694	18	36.7	9	2	US-09-680-497-439	Sequence 439, Ap	767	17	34.7	7	2	US-09-945-901-8	Sequence 8, Appl
695	18	36.7	9	2	US-09-680-497-453	Sequence 453, Ap	768	17	34.7	7	2	US-10-150-262A-11	Sequence 11, Appl
696	18	36.7	9	2	US-09-823-240A-8	Sequence 8, Appl	769	17	34.7	7	6	5258287-35	Patent No. 5258287
697	18	36.7	9	2	US-10-115-132-386	Sequence 386, Ap	770	17	34.7	8	1	US-08-057-167-7	Sequence 7, Appl
698	18	36.7	9	2	US-10-121-857-17	Sequence 17, Appl	771	17	34.7	8	1	US-08-256-236-7	Sequence 7, Appl
699	18	36.7	9	2	US-09-413-788-143	Sequence 143, Ap	772	17	34.7	8	1	US-08-256-236-8	Sequence 8, Appl
700	18	36.7	9	2	US-09-600-432-4	Sequence 4, Appl	773	17	34.7	8	1	US-08-340-812-14	Sequence 14, Appl
701	18	36.7	9	2	US-09-935-430-15	Sequence 15, Appl	774	17	34.7	8	1	US-08-208-181A-4	Sequence 4, Appl
702	18	36.7	9	2	US-09-935-430-33	Sequence 33, Appl	775	17	34.7	8	1	US-08-459-064B-14	Sequence 14, Appl
703	18	36.7	9	2	US-09-935-430-235	Sequence 235, Ap	776	17	34.7	8	1	US-08-459-064B-31	Sequence 31, Appl
704	18	36.7	9	2	US-09-935-430-314	Sequence 314, Ap	777	17	34.7	8	1	US-08-459-064B-31	Sequence 31, Appl
705	18	36.7	9	2	US-09-935-430-478	Sequence 478, Ap	778	17	34.7	8	1	US-08-460-421A-14	Sequence 14, Appl
706	18	36.7	9	2	US-09-865-548A-48	Sequence 48, Appl	779	17	34.7	8	1	US-08-460-421A-31	Sequence 31, Appl
707	18	36.7	9	2	US-09-865-548A-60	Sequence 60, Appl	780	17	34.7	8	1	US-08-256-018-9	Sequence 9, Appl
708	18	36.7	9	2	US-09-865-548A-73	Sequence 73, Appl	781	17	34.7	8	1	US-08-717-169-14	Sequence 14, Appl
709	18	36.7	9	4	PCT-US95-00147-59	Sequence 59, Appl	782	17	34.7	8	1	US-08-762-308-8	Sequence 8, Appl
710	18	36.7	9	6	5175148-1	Patent No. 5175148	783	17	34.7	8	1	US-08-467-046-14	Sequence 14, Appl
711	17	34.7	4	1	US-08-747-137-174	Sequence 174, Ap	784	17	34.7	8	2	US-08-769-745-22	Sequence 22, Appl
712	17	34.7	5	1	US-08-751-767A-77	Sequence 77, Appl	785	17	34.7	8	2	US-08-159-339A-1160	Sequence 1160, Ap
713	17	34.7	5	2	US-09-082-358B-31	Sequence 31, Appl	786	17	34.7	8	2	US-08-444-818-720	Sequence 720, App
714	17	34.7	5	2	US-09-720-041-5	Sequence 5, Appl	787	17	34.7	8	2	US-08-444-818-721	Sequence 721, App
715	17	34.7	5	2	US-10-317-252B-391	Sequence 391, Ap	788	17	34.7	8	2	US-08-444-818-722	Sequence 722, App
716	17	34.7	5	2	US-09-688-017-130	Sequence 130, Ap	789	17	34.7	8	2	US-09-078-173A-20	Sequence 20, Appl
717	17	34.7	6	1	US-08-282-758B-5	Sequence 5, Appl	790	17	34.7	8	2	US-08-706-054A-9	Sequence 9, Appl
718	17	34.7	6	1	US-08-854-222-9	Sequence 9, Appl	791	17	34.7	8	2	US-03-228-901A-14	Sequence 14, Appl
719	17	34.7	6	1	US-08-472-453-58	Sequence 58, Appl	792	17	34.7	8	2	US-09-313-299-9	Sequence 9, Appl
720	17	34.7	6	2	US-09-188-039-9	Sequence 9, Appl	793	17	34.7	8	2	US-09-809-517A-20	Sequence 20, Appl
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835	17	34.7	9	2	US-08-556-978B-38	Sequence 38, Appl	908	16	32.7	5	2	US-09-134-803-4	Sequence 4, Appli
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ALIGNMENTS

RESULT 1
US-08-787-547-55
; Sequence 55, Application US/08787547
; Patent No. 5783567
; GENERAL INFORMATION:
; APPLICANT: Hedley, Mary Lynne
; APPLICANT: Curley, Joanne M.
; APPLICANT: Langer, Robert S.
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY
; TITLE OF INVENTION: OF NUCLEIC ACID
; NUMBER OF SEQUENCES: 107
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; ADDRESSEE: Fish & Richardson, P.C.
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; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/787,547
; FILING DATE: 22-JAN-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
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; TELEPHONE: 617-542-5070
; TELEFAX: 617-542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 55:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

US-08-787-547-55
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Best Local Similarity 77.8%; Pred. No. 4.6e+05;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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RESULT 2
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; Sequence 19, Application US/08288059
; Patent No. 5827866
; GENERAL INFORMATION:
; APPLICANT: FINN, OLIVERA J.
; APPLICANT: FONTENOT, J. D.
; APPLICANT: MONTELARO, RONALD C.
; TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
; TITLE OF INVENTION: AND MUCIN-LIKE PEPTIDES, AND USES THEREOF
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/288,059
; FILING DATE: 08-AUG-1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: CHAPIN, MARLANA K.
; REGISTRATION NUMBER: 35,843
; REFERENCE/DOCKET NUMBER: 61137/205204
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 19:
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; MOLECULE TYPE: peptide
; US-08-288-059-19
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Best Local Similarity 77.8%; Pred. No. 4.6e+05;
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; Sequence 45, Application US/09593870A
; Patent No. 6548643
; GENERAL INFORMATION:
; APPLICANT: McKenzie, Ian F.C.
; APPLICANT: Apostolopoulos, Vasso
; APPLICANT: Pietersz, Geoff Allan
; TITLE OF INVENTION: Antigen Carbohydrate Compounds and Their

;; TITLE OF INVENTION: Use in Immunotherapy
;; FILE REFERENCE: 2368-McKenzie
;; CURRENT APPLICATION NUMBER: US/09/593,870A
;; CURRENT FILING DATE: 2000-06-14
;; PRIOR APPLICATION NUMBER: 09/223,043
;; PRIOR FILING DATE: 1998-12-30
;; NUMBER OF SEQ ID NOS: 69
;; SOFTWARE: FastSeq for Windows Version 3.0
;; SEQ ID NO 45
;; LENGTH: 9
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-593-870A-45

Query Match 79.6%; Score 39; DB 2; Length 9;
Best Local Similarity 77.8%; Pred. No. 4.6e+05;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 STAPPVHV 9
Db 1 STAPPAGV 9

RESULT 4
US-09-497-232-1
; Sequence 1, Application US/09497232
; Patent No. 6600012
; GENERAL INFORMATION:
; APPLICANT: AGRAWAL, Babita
; REDDISH, Mark A.
; LONGENECKER, B. Michael
; TITLE OF INVENTION: METHOD FOR GENERATING ACTIVATED T-CELLS
; AND ANTIGEN-PULSED ANTIGEN-PRESENTING CELLS

;; NUMBER OF SEQUENCES: 34
;; CORRESPONDENCE ADDRESSES:
;; ADDRESSEE: FOLEY & LARDNER
;; STREET: 3000 K Street, N.W.
;; CITY: Washington
;; STATE: D.C.
;; COUNTRY: U.S.A.
;; ZIP: 20007-5109
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: Patent in Release #1.0, Version #1.30
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/09/497,232
;; FILING DATE: 03-Feb-2000
;; CLASSIFICATION: <Unknown>
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: US/09/074,410
;; FILING DATE: 08-MAY-1998
;; APPLICATION NUMBER: US 60/045,949
;; FILING DATE: 08-MAY-1997
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Saxe, Bernhard D.
;; REGISTRATION NUMBER: 28,665
;; REFERENCE/DOCKET NUMBER: 042881/0114
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (202) 672-5300
;; TELEFAX: (202) 672-5399

;; INFORMATION FOR SEQ ID NO: 1:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 9 amino acids
;; TYPE: amino acid
;; STRANDEDNESS: <Unknown>
;; TOPOLOGY: linear
;; MOLECULE TYPE: peptide
;; SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-497-232-1

Query Match 79.6%; Score 39; DB 2; Length 9;
Best Local Similarity 77.8%; Pred. No. 4.6e+05;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 STAPPVHV 9
Db 1 STAPPAGV 9
RESULT 5
US-10-296-317-44
; Sequence 44, Application US/10296317
; Patent No. 6951647
; GENERAL INFORMATION:
; APPLICANT: CEL-Sci Corp
; APPLICANT: Zimmermann, Daniel S
; APPLICANT: Sarin, Prem S
; TITLE OF INVENTION: T CELL BINDING LIGAND PEPTIDES, PEPTIDE
; FILE REFERENCE: CS-112
; CURRENT APPLICATION NUMBER: US/10/296,317
; CURRENT FILING DATE: 2002-11-22
; PRIOR APPLICATION NUMBER: US 60/206548
; PRIOR FILING DATE: 2000-05-24
; PRIOR APPLICATION NUMBER: PCT/US07/16793
; PRIOR FILING DATE: 2001-05-24
; NUMBER OF SEQ ID NOS: 96
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 44
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Muc1 Peptide M1b
US-10-296-317-44

Query Match 79.6%; Score 39; DB 2; Length 9;
Best Local Similarity 77.8%; Pred. No. 4.6e+05;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 STAPPVHV 9
Db 1 STAPPAGV 9

RESULT 6
US-09-497-232-25
; Sequence 25, Application US/09497232
; Patent No. 6600012
; GENERAL INFORMATION:
; APPLICANT: AGRAWAL, Babita
; KRANTZ, Mark J.
; REDDISH, Mark A.
; LONGENECKER, B. Michael
; TITLE OF INVENTION: METHOD FOR GENERATING ACTIVATED T-CELLS
; AND ANTIGEN-PULSED ANTIGEN-PRESENTING CELLS
; NUMBER OF SEQUENCES: 34
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: FOLEY & LARDNER
; STREET: 3000 K Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/497,232
; FILING DATE: 03-Feb-2000
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:

```
; APPLICATION NUMBER: US/09/074, 410
; FILING DATE: 08-MAY-1998
; APPLICATION NUMBER: US 60/045,949
; FILING DATE: 08-MAY-1997
; ATTORNEY/AGENT INFORMATION:
;   NAME: Saxe, Bernhard D.
;   REGISTRATION NUMBER: 28,665
;   REFERENCE/DOCKET NUMBER: 042881/0114
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (202) 672-5300
;   TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 25:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 9 amino acids
;     TYPE: amino acid
;     STRANDEDNESS: <Unknown>
;     TOPOLOGY: linear
;   MOLECULE TYPE: peptide
;   SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-497-232-25

Query Match      73.5%; Score 36; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy      1 STAPPVHV 9
      :|||||
Db      1 ATAPPAGV 9

RESULT 7
US-08-288-059-17
; Sequence 17, Application US/08288059
; Patent No. 5827666
; GENERAL INFORMATION:
;   APPLICANT: FINN, OLIVERA J.
;   APPLICANT: FONTELOT, J. D.
;   APPLICANT: MONTELLARO, RONALD C.
; TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
;   STREET: 1100 NEW YORK AVENUE, N.W.
;   CITY: WASHINGTON
;   STATE: D.C.
;   COUNTRY: USA
;   ZIP: 20005
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/288,059
;   FILING DATE: 08-AUG-1994
;   CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
;   NAME: CHAPIN, MARLANA K.
;   REGISTRATION NUMBER: 35,843
;   REFERENCE/DOCKET NUMBER: 61137/205204
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 202-861-3711
;   TELEFAX: 202-822-0944
;   TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 17:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 9 amino acids
;     TYPE: amino acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: peptide
US-08-288-059-17

; APPLICATION NUMBER: US/09/074, 410
; FILING DATE: 08-MAY-1998
; APPLICATION NUMBER: US 60/045,949
; FILING DATE: 08-MAY-1997
; ATTORNEY/AGENT INFORMATION:
;   NAME: Saxe, Bernhard D.
;   REGISTRATION NUMBER: 28,665
;   REFERENCE/DOCKET NUMBER: 042881/0114
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: (202) 672-5300
;   TELEFAX: (202) 672-5399
; INFORMATION FOR SEQ ID NO: 25:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 9 amino acids
;     TYPE: amino acid
;     STRANDEDNESS: <Unknown>
;     TOPOLOGY: linear
;   MOLECULE TYPE: peptide
;   SEQUENCE DESCRIPTION: SEQ ID NO: 25:
US-09-497-232-25

Query Match      71.4%; Score 35; DB 1; Length 9;
Best Local Similarity 85.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 STAPPVH 7
      :|||||
Db      3 STAPPAH 9

RESULT 8
US-08-288-059-18
; Sequence 18, Application US/08288059
; Patent No. 5827666
; GENERAL INFORMATION:
;   APPLICANT: FINN, OLIVERA J.
;   APPLICANT: FONTELOT, J. D.
;   APPLICANT: MONTELLARO, RONALD C.
; TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
;   STREET: 1100 NEW YORK AVENUE, N.W.
;   CITY: WASHINGTON
;   STATE: D.C.
;   COUNTRY: USA
;   ZIP: 20005
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/288,059
;   FILING DATE: 08-AUG-1994
;   CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
;   NAME: CHAPIN, MARLANA K.
;   REGISTRATION NUMBER: 35,843
;   REFERENCE/DOCKET NUMBER: 61137/205204
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 202-861-3711
;   TELEFAX: 202-822-0944
;   TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 18:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 9 amino acids
;     TYPE: amino acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: peptide
US-08-288-059-18

Query Match      71.4%; Score 35; DB 1; Length 9;
Best Local Similarity 85.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 STAPPVH 7
      :|||||
Db      2 STAPPAH 8

RESULT 9
US-08-288-059-20
; Sequence 20, Application US/08288059
; Patent No. 5827666
; GENERAL INFORMATION:
;   APPLICANT: FINN, OLIVERA J.
;   APPLICANT: FONTELOT, J. D.
;   APPLICANT: MONTELLARO, RONALD C.
; TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
;   ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
;   STREET: 1100 NEW YORK AVENUE, N.W.
;   CITY: WASHINGTON
;   STATE: D.C.
;   COUNTRY: USA
;   ZIP: 20005
; COMPUTER READABLE FORM:
;   MEDIUM TYPE: Floppy disk
;   COMPUTER: IBM PC compatible
;   OPERATING SYSTEM: PC-DOS/MS-DOS
;   SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
;   APPLICATION NUMBER: US/08/288,059
;   FILING DATE: 08-AUG-1994
;   CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
;   NAME: CHAPIN, MARLANA K.
;   REGISTRATION NUMBER: 35,843
;   REFERENCE/DOCKET NUMBER: 61137/205204
; TELECOMMUNICATION INFORMATION:
;   TELEPHONE: 202-861-3711
;   TELEFAX: 202-822-0944
;   TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 17:
;   SEQUENCE CHARACTERISTICS:
;     LENGTH: 9 amino acids
;     TYPE: amino acid
;     STRANDEDNESS: single
;     TOPOLOGY: linear
;   MOLECULE TYPE: peptide
US-08-288-059-17
```

NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/288,059
FILING DATE: 08-AUG-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: CHAPIN, MARLANA K.
REGISTRATION NUMBER: 35,843
REFERENCE/DOCKET NUMBER: 61137/205204
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-288-059-20

Query Match 71.4%; Score 35; DB 1; Length 9;
Best Local Similarity 75.0%; Pred. No. 4.6e+05;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 TAPPVHV 9
|||||
Db 1 TAPPAGV 8

RESULT 10
US-09-593-870A-68
Sequence 68, Application US/09593870A
Patent No. 6548643
GENERAL INFORMATION:
APPLICANT: McKenzie, Ian F.C.
APPLICANT: Apostolopoulos, Vasso
APPLICANT: Pieterse, Geoff Allan
TITLE OF INVENTION: Antigen Carbohydrate Compounds and Their
FILE REFERENCE: 2368-McKenzie
CURRENT APPLICATION NUMBER: US/09/593,870A
CURRENT FILING DATE: 2000-06-14
PRIOR FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 68
LENGTH: 9
TYPE: PRT
ORGANISM: Homo sapiens
US-09-593-870A-68

Query Match 71.4%; Score 35; DB 2; Length 9;
Best Local Similarity 75.0%; Pred. No. 4.6e+05;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 TAPPVHV 9
|||||
Db 1 TAPPAGV 8

RESULT 11
US-08-134-198E-23
Sequence 23, Application US/08134198E
Patent No. 6190885
GENERAL INFORMATION:
APPLICANT: CANCER RESEARCH FUND
APPLICANT: OF CONTRA COSTA
APPLICANT: PETERSON, JERRY A.
APPLICANT: LAROCCA, DAVID J.
TITLE OF INVENTION: FUSION PROTEIN CONTAINING HMFG
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pretty, Schroeder & Poplawski
STREET: 444 South Flower Street, Suite 1900
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
SOFTWARE: Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/134,198E
FILING DATE: October 8, 1993
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: P66 38208 (CRFC-003C)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 622-7700
TELEFAX: (213) 489-4210
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 6
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-134-198E-23

Query Match 63.3%; Score 31; DB 2; Length 6;
Best Local Similarity 83.3%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 TAPPVH 7
|||||
Db 1 TAPPAGH 6

RESULT 12
US-08-288-059-21
Sequence 21, Application US/08288059
Patent No. 5827666
GENERAL INFORMATION:
APPLICANT: FINN, OLIVERA J.
APPLICANT: FONTENOT, J. D.
APPLICANT: MONTECARO, RONALD C.
TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005

```

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/288,059
; FILING DATE: 08-AUG-1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: CHAPIN, MARLANA K.
; REGISTRATION NUMBER: 35,843
; REFERENCE/DOCKET NUMBER: 61137/205204
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-288-059-21

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```

Query Match      61.2%; Score 30; DB 1; Length 9;
Best Local Similarity 71.4%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

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Qy      3 APPVHV 9
      |||||
Db      1 APPAHGV 7

```

RESULT 13

```

US-09-593-870A-67
; Sequence 67, Application US/09593870A
; Patent No. 6548643
; GENERAL INFORMATION:
; APPLICANT: McKenzie, Ian F.C.
; APPLICANT: Apostolopoulos, Vasso
; APPLICANT: Pietercz, Geoff Allan
; TITLE OF INVENTION: Antigen Carbohydrate Compounds and Their
; FILE REFERENCE: 2368-McKenzie
; CURRENT APPLICATION NUMBER: US/09/593,870A
; CURRENT FILING DATE: 2000-06-14
; PRIOR APPLICATION NUMBER: 09/223,043
; PRIOR FILING DATE: 1998-12-30
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 67
; LENGTH: 9
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-593-870A-67

```

```

Query Match      61.2%; Score 30; DB 2; Length 9;
Best Local Similarity 71.4%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy      3 APPVHV 9
      |||||
Db      1 APPAHGV 7

```

RESULT 14

```

US-08-134-198E-21
; Sequence 21, Application US/08134198E
; Patent No. 6190885
; GENERAL INFORMATION:
; APPLICANT: CANCER RESEARCH FUND

```

```

; APPLICANT: OF CONTRA COSTA
; APPLICANT: PETERSON, JERRY A.
; APPLICANT: LAROCCA, DAVID J.
; TITLE OF INVENTION: FUSION PROTEIN CONTAINING HMPG
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pretty, Schroeder & Poplawski
; STREET: 444 South Flower Street, Suite 1900
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0,
; SOFTWARE: Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/134,198E
; FILING DATE: October 8, 1993
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: P66 38208 (CRFC-003C)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 622-7700
; TELEFAX: (213) 489-4210
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 6
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-134-198E-21

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```

Query Match      55.1%; Score 27; DB 2; Length 6;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 STAPP 5
      |||||
Db      2 STAPP 6

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RESULT 15

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US-08-134-198E-22
; Sequence 22, Application US/08134198E
; Patent No. 6190885
; GENERAL INFORMATION:
; APPLICANT: CANCER RESEARCH FUND
; APPLICANT: OF CONTRA COSTA
; APPLICANT: PETERSON, JERRY A.
; APPLICANT: LAROCCA, DAVID J.
; TITLE OF INVENTION: FUSION PROTEIN CONTAINING HMPG
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pretty, Schroeder & Poplawski
; STREET: 444 South Flower Street, Suite 1900
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0,
; SOFTWARE: Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/134,198E

```


FILING DATE: October 8, 1993
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: P66 38208 (CRFC-003C)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 622-7700
TELEFAX: (213) 489-4210
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 6
TYPE: amino acid
STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-134-198E-22

Query Match 55.1%; Score 27; DB 2; Length 6;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPP 5
Db 1 STAPP 5

RESULT 16
US-08-288-059-16
Sequence 16, Application US/08288059
Patent No. 5827866
GENERAL INFORMATION:
APPLICANT: FINN, OLIVERA J.
APPLICANT: FONTENOT, J. D.
APPLICANT: MONTELAPO, RONALD C.
TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN DABY & CUSHMAN, L.L.P.
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/288,059
FILING DATE: 08-AUG-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: CHAPIN, MARLANA K.
REGISTRATION NUMBER: 35,843
REFERENCE/DOCKET NUMBER: 61137/205204
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-288-059-16

Query Match 55.1%; Score 27; DB 1; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;

Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPP 5
Db 4 STAPP 8

RESULT 17
US-09-593-870A-43
Sequence 43, Application US/09593870A
Patent No. 6548643
GENERAL INFORMATION:
APPLICANT: Mckenzie, Ian F.C.
APPLICANT: Apostolopoulos, Vasso
APPLICANT: Pietersz, Geoff Allan
TITLE OF INVENTION: Antigen Carbohydrate Compounds and Their
TITLE OF INVENTION: Use in Immunotherapy
FILE REFERENCE: 2368-Mckenzie
CURRENT APPLICATION NUMBER: US/09/593,870A
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: 09/223,043
PRIOR FILING DATE: 1998-12-30
NUMBER OF SEQ ID NOS: 69
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 43
LENGTH: 9
TYPE: PRT
ORGANISM: Homo sapiens
US-09-593-870A-43

Query Match 55.1%; Score 27; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPP 5
Db 4 STAPP 8

RESULT 18
US-08-134-198E-24
Sequence 24, Application US/08134198E
Patent No. 6190885
GENERAL INFORMATION:
APPLICANT: CANCER RESEARCH FUND
APPLICANT: OF CONTRA COSTA
APPLICANT: PETERSON, JERRY A.
APPLICANT: LAROCCA, DAVID J.
TITLE OF INVENTION: FUSION PROTEIN CONTAINING HMFG
NUMBER OF SEQUENCES: 42
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pretty, Schroeder & Poplawski
STREET: 444 South Flower Street, Suite 1900
CITY: Los Angeles
STATE: California
COUNTRY: USA
ZIP: 90071
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0,
SOFTWARE: Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/134,198E
FILING DATE: October 8, 1993
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Amzel, Viviana
REGISTRATION NUMBER: 30,930
REFERENCE/DOCKET NUMBER: P66 38208 (CRFC-003C)
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 622-7700

```
; TELEFAX: (213) 489-4210
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 6
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-134-198E-24

Query Match 53.1%; Score 26; DB 2; Length 6;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 PPVH 7
DB 1 APPAH 5

RESULT 19
US-08-134-198E-25
; Sequence 25, Application US/08134198E
; Patent No. 6190885
; GENERAL INFORMATION:
; APPLICANT: CANCER RESEARCH FUND
; APPLICANT: OF CONTRA COSTA
; APPLICANT: PETERSON, JERRY A.
; APPLICANT: LAROCCA, DAVID J.
; TITLE OF INVENTION: FUSION PROTEIN CONTAINING HMFG
; NUMBER OF SEQUENCES: 42
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pretty, Schroeder & Poplawski
; STREET: 444 South Flower Street, Suite 1900
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90071
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0,
; SOFTWARE: Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/134,198E
; FILING DATE: October 8, 1993
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Amzel, Viviana
; REGISTRATION NUMBER: 30,930
; REFERENCE/DOCKET NUMBER: P66 38208 (CRFC-003C)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 622-7700
; TELEFAX: (213) 489-4210
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 6
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-134-198E-25

Query Match 53.1%; Score 26; DB 2; Length 6;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 PPVHV 9
DB 1 PPAHV 6

RESULT 20
US-08-472-453-4
; Sequence 4, Application US/08472453
; Patent No. 5831002
; GENERAL INFORMATION:
; APPLICANT: Haupt, Andreas
; APPLICANT: Emling, Franz
; APPLICANT: Romerdahl, Cynthia
; TITLE OF INVENTION: No. 5831002el Compounds, The Preparation and Use
; TITLE OF INVENTION: thereof
; NUMBER OF SEQUENCES: 59
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Patricia Granahan, Esq., Hamilton, Brook, Smith &
; ADDRESSEE: Reynolds, P.C.
; STREET: Two Milita Drive
; CITY: Lexington
; STATE: MA
; COUNTRY: USA
; ZIP: 02173
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/472,453
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/431,795
; FILING DATE: 05-JAN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/985,696
; FILING DATE: 25-NOV-1992
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/885,788
; FILING DATE: 20-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Granahan, Patricia.
; REGISTRATION NUMBER: 32,227
; REFERENCE/DOCKET NUMBER: BEC-029C
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 781 8616240
; TELEFAX: 781 8619540
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 7 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-472-453-4

Query Match 53.1%; Score 26; DB 1; Length 7;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PPVH 7
DB 4 PPVH 7

RESULT 21
US-08-288-059-22
; Sequence 22, Application US/08288059
; Patent No. 5827666
; GENERAL INFORMATION:
; APPLICANT: FINN, OLIVERA J.
; APPLICANT: FONTENOT, J. D.
; APPLICANT: MONTELAPO, RONALD C.
; TITLE OF INVENTION: SYNTHETIC MULTIPLE TANDEM REPEAT MUCIN
; TITLE OF INVENTION: AND MUCIN-LIKE PEPTIDES, AND USES THEREOF
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
```

ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/288,059
FILING DATE: 08-AUG-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: CHAPIN, MARLANA K.
REGISTRATION NUMBER: 35,843
REFERENCE/DOCKET NUMBER: 61137/205204
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-288-059-22

Query Match 53.1%; Score 26; DB 1; Length 9;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 2; Indels 0;

Qy 4 PPVHNV 9
Db 1 PPAHGV 6

RESULT 22
US-08-210-266A-1
; Sequence 1, Application US/08210266A
; Patent No. 5545619
; GENERAL INFORMATION:
; APPLICANT: Atkinson, John P.
; APPLICANT: Hourcade, Dennis
; APPLICANT: Krych, Malgorzata
; TITLE OF INVENTION: Modified Complement System
; TITLE OF INVENTION: Regulators
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Patrea L. Pabst
; STREET: 2800 One Atlantic Center, 1201 West Peachtree
; STREET: Street
; CITY: Atlanta
; STATE: Georgia
; COUNTRY: US
; ZIP: 30309-3450
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/210,266A
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/695,514
FILING DATE: 03-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: WU101
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404)873-8794
TELEFAX: (404)873-8795
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 3
OTHER INFORMATION: /note="K/R"
FEATURE:
NAME/KEY: Modified-site

REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: WU101
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404)873-8794
TELEFAX: (404)873-8795
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-210-266A-1

Query Match 51.0%; Score 25; DB 1; Length 8;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0;

Qy 1 STAPPV 6
Db 1 STKPP1 6

RESULT 23
US-08-210-266A-8
; Sequence 8, Application US/08210266A
; Patent No. 5545619
; GENERAL INFORMATION:
; APPLICANT: Atkinson, John P.
; APPLICANT: Hourcade, Dennis
; APPLICANT: Krych, Malgorzata
; TITLE OF INVENTION: Modified Complement System
; TITLE OF INVENTION: Regulators
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Patrea L. Pabst
; STREET: 2800 One Atlantic Center, 1201 West Peachtree
; STREET: Street
; CITY: Atlanta
; STATE: Georgia
; COUNTRY: US
; ZIP: 30309-3450
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/210,266A
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/695,514
FILING DATE: 03-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: WU101
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404)873-8794
TELEFAX: (404)873-8795
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 3
OTHER INFORMATION: /note="K/R"
FEATURE:
NAME/KEY: Modified-site

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; ; LOCATION: 6
; ; OTHER INFORMATION: /note= "I/L/V"
; ; FEATURE:
; ; NAME/KEY: Modified-site
; ; LOCATION: 8
; ; OTHER INFORMATION: /note= "Q/N"
US-08-210-266A-8

Query Match 51.0%; Score 25; DB 1; Length 8;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAPPV 6
Db 1 STKPPI 6

RESULT 24
US-08-688-675-1
; Sequence 1, Application US/08688675
; Patent No. 5719127
; GENERAL INFORMATION:
; APPLICANT: Atkinson, John P.
; APPLICANT: Hourcade, Dennis
; APPLICANT: Krych, Malgorzata
; TITLE OF INVENTION: Modified Complement System Regulators
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Patrea L. Pabst
; STREET: 2800 One Atlantic Center, 1201 West Peachtree
; CITY: Atlanta
; STATE: Georgia
; COUNTRY: US
; ZIP: 30309-3450
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/688,675
; FILING DATE: 30-JUN-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/210,266
; FILING DATE: 18-MAR-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/695,514
; FILING DATE: 03-MAY-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Pabst, Patrea L.
; REGISTRATION NUMBER: 31,284
; REFERENCE/DOCKET NUMBER: WU101div2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (404)873-8794
; TELEFAX: (404)873-8795
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 3
; OTHER INFORMATION: /note= "K/R"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 6
; OTHER INFORMATION: /note= "I/L/V"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 8
; OTHER INFORMATION: /note= "Q/N"
US-08-688-675-8

Query Match 51.0%; Score 25; DB 1; Length 8;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAPPV 6
Db 1 STKPPI 6

RESULT 26
US-08-477-860C-1
; Sequence 1, Application US/08477860C
```

Patent No. 6010873
GENERAL INFORMATION:
APPLICANT: Atkinson, John P.
APPLICANT: Hourcade, Dennis
APPLICANT: Kryw, Malgorzata
TITLE OF INVENTION: Modified Complement System Regulators
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Patrea L. Pabst
STREET: 2800 One Atlantic Center, 1201 West Peachtree
CITY: Atlanta
STATE: Georgia
COUNTRY: US
ZIP: 30309-3450
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/477,860C
FILING DATE: 7-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/210,266
FILING DATE: 18-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/695,514
FILING DATE: 03-MAY-1991
ATTORNEY/AGENT INFORMATION:
NAME: Pabst, Patrea L.
REGISTRATION NUMBER: 31,284
REFERENCE/DOCKET NUMBER: WU 101 DIV
TELECOMMUNICATION INFORMATION:
TELEPHONE: (404)873-8794
TELEFAX: (404)873-8795
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 8 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-477-860C-1

Query Match 51.0%; Score 25; DB 2; Length 8;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAPPV 6
Db 1 STKPI 6

RESULT 27
US-100-930A-22
Sequence 22, Application US/09100930A
Patent No. 6248549
GENERAL INFORMATION:
APPLICANT: Van Eyk, Jennifer E.
APPLICANT: Mak, Alan S.
APPLICANT: Cote, Graham P.
TITLE OF INVENTION: Methods of Modulating Muscle Contraction
FILE REFERENCE: 1997-021-03US
CURRENT APPLICATION NUMBER: US/09/100,930A
CURRENT FILING DATE: 1998-06-22
PRIOR APPLICATION NUMBER: 60/050,478
PRIOR FILING DATE: 1997-06-23
PRIOR APPLICATION NUMBER: 60/089,505
PRIOR FILING DATE: 1998-06-16
NUMBER OF SEQ ID NOS: 26
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 22

LENGTH: 9
TYPE: PRT
ORGANISM: Unknown
FEATURE:
NAME/KEY: PEPTIDE
LOCATION: (1)..(9)
OTHER INFORMATION: PAK site A autophosphorylation
NAME/KEY: PEPTIDE
LOCATION: (9)
OTHER INFORMATION: Targeted Ser phospho-amino acid
US-09-100-930A-22

Query Match 51.0%; Score 25; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 3 APPVHN 8
Db 2 APPMRN 7

RESULT 28
US-08-403-459-67
Sequence 67, Application US/08403459
Patent No. 6514942
GENERAL INFORMATION:
APPLICANT: Ioannides, Constantin G.
APPLICANT: Fisk, Bryan A.
APPLICANT: Ioannides, Maria G.
TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR STIMULATING
TITLE OF INVENTION: T-LYMPHOCYTES
NUMBER OF SEQUENCES: 68
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: United States of America
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS/ASCII
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/403,459
FILING DATE: Concurrently Herewith
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: UTSC:390/KIT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (512) 418-3000
TELEFAX: (713) 789-2679
TELEX: 79-0924
INFORMATION FOR SEQ ID NO: 67:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-403-459-67

Query Match 51.0%; Score 25; DB 2; Length 9;
Best Local Similarity 55.6%; Pred. No. 4.6e+05;
Matches 5; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1 STAPPVHN 9
Db 1 SLADPAHGV 9

```
RESULT 29
US-08-836-778-1
; Sequence 1, Application US/08036778
; Patent No. 6451368
; GENERAL INFORMATION:
; APPLICANT: ELLIOTT, ROBERT BARTLETT
; APPLICANT: HILL, JEREMY PAUL
; TITLE OF INVENTION: METHOD OF SELECTING NON-DIABETOGENIC MILK OR MILK
; TITLE OF INVENTION: PRODUCTS AND MILK OR MILK PRODUCTS SO SELECTED
; FILE REFERENCE: P369648 DCC
; CURRENT APPLICATION NUMBER: US/08/836,778
; CURRENT FILING DATE: 1995-11-03
; PRIOR APPLICATION NUMBER: NZ 264862
; PRIOR FILING DATE: 1994-11-04
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 6
; TYPE: PPT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:BOVINE MILK
; OTHER INFORMATION: PROTEIN
US-08-836-778-1

Query Match          49.0%; Score 24; DB 2; Length 6;
Best Local Similarity 75.0%; Pred. No. 4.6e+05;
Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      5 PVHN 8
      1:11
Db      3 PIHN 6

RESULT 30
US-08-666-473-24
; Sequence 24, Application US/08666473
; Patent No. 5843713
; GENERAL INFORMATION:
; APPLICANT: YOSHIDA, Aruto
; APPLICANT: TAKEUCHI, Makoto
; TITLE OF INVENTION: PEPTIDE SEQUENCE THAT FORMS MUCIN SUGAR
; TITLE OF INVENTION: CHAIN AND TECHNIQUE FOR MODIFYING PROTEIN TO BE LINKED
; TITLE OF INVENTION: WITH MUCIN SUGAR CHAIN
; NUMBER OF SEQUENCES: 114
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Foley & Lardner
; STREET: 3000 K Street, N.W., Suite 500
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20007-5109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 19-SEP-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: WO PCT/JP95/02238
; FILING DATE: 01-NOV-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 7-22101
; FILING DATE: 09-FEB-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 6-269111
; FILING DATE: 01-NOV-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: BENT, Stephen A.
```

```
; REGISTRATION NUMBER: 29,768
; REFERENCE/DOCKET NUMBER: 16887/837
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202)672-5300
; TELEFAX: (202)672-5399
; TELEX: 904136
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 7 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-666-473-24

Query Match          49.0%; Score 24; DB 1; Length 7;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy      1 STAPP 5
      1:1111
Db      3 ATAPP 7

RESULT 31
US-08-444-818-340
; Sequence 340, Application US/08444818
; Patent No. 6150087
; GENERAL INFORMATION:
; APPLICANT: Chien, David Y.
; APPLICANT: Rutter, William J.
; TITLE OF INVENTION: NANBV Diagnostics and Vaccines
; NUMBER OF SEQUENCES: 777
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Chiron Corporation
; STREET: 4560 Horton Street
; CITY: Emeryville
; STATE: CA
; COUNTRY: USA
; ZIP: 94608-2916
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: US/08/444,818
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/403,590
; FILING DATE: 14-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Harbin, Alisa A.
; REGISTRATION NUMBER: 33,895
; REFERENCE/DOCKET NUMBER: 0110.002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (508)359-3876
; TELEFAX: (508)359-3885
; INFORMATION FOR SEQ ID NO: 340:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-444-818-340

Query Match          49.0%; Score 24; DB 2; Length 8;
Best Local Similarity 50.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy      1 STAPPVHN 8
      1:1111
```

Db 1 NTRPPLGN 8

RESULT 32

US-08-338-634-16

; Sequence 16, Application US/08338634

; Patent No. 5679641

; GENERAL INFORMATION:

; APPLICANT:

; TITLE OF INVENTION: Peptides of human p53 protein for use

; TITLE OF INVENTION: in human T cell response inducing compositions, and

; TITLE OF INVENTION: human p53 protein-specific cytotoxic T-lymphocytes.

; NUMBER OF SEQUENCES: 39

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Hoffmann & Baron

; STREET: 350 Jericho Turnpike

; CITY: Jericho

; STATE: New York

; COUNTRY: United States of America

; ZIP: 11758

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: ASCII

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/338,634

; FILING DATE: 06-February-1995

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: PCT/NL93/00102

; FILING DATE: 18-May-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Baron, Ronald J.

; REGISTRATION NUMBER: 29,281

; REFERENCE/DOCKET NUMBER: 294-26

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (516) 822-3550

; TELEFAX: (516) 822-3582

; INFORMATION FOR SEQ ID NO: 16:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 9 amino acids

; TYPE: amino acid

; STRANDEDNESS: unknown

; TOPOLOGY: unknown

; MOLECULE TYPE: peptide

; HYPOTHETICAL: NO

US-08-338-634-16

Query Match 49.0%; Score 24; DB 1; Length 9;

Best Local Similarity 80.0%; Pred. No. 4.6e+05;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 APPVH 7

Db 3 APPQH 7

RESULT 33

US-09-601-729-98

; Sequence 98, Application US/09601729

; Patent No. 6683052

; GENERAL INFORMATION:

; APPLICANT: THIAM, KADER

; APPLICANT: AURIAULT, CLAUDE

; APPLICANT: GRAS-MASSE, HELENE

; APPLICANT: LOING, ESTELLE

; APPLICANT: VERWAERDE, CLAUDIE

; TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USES

; FILE REFERENCE: USB-97-AU-IN

; CURRENT APPLICATION NUMBER: US/09/601,729

; FILING DATE: 2000-11-20

; PRIOR APPLICATION NUMBER: PCT/FR99/00259

; PRIOR FILING DATE: 1999-02-05

; PRIOR APPLICATION NUMBER: 98 01439

; PRIOR FILING DATE: 1998-02-06

; NUMBER OF SEQ ID NOS: 281

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 98

; LENGTH: 9

; TYPE: PPT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: Synthetic

US-09-601-729-102

Query Match 49.0%; Score 24; DB 2; Length 9;

Best Local Similarity 80.0%; Pred. No. 4.6e+05;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 APPVH 7

Db 3 APPQH 7

RESULT 34

US-09-601-729-102

; Sequence 102, Application US/09601729

; Patent No. 6683052

; GENERAL INFORMATION:

; APPLICANT: THIAM, KADER

; APPLICANT: AURIAULT, CLAUDE

; APPLICANT: GRAS-MASSE, HELENE

; APPLICANT: LOING, ESTELLE

; APPLICANT: VERWAERDE, CLAUDIE

; APPLICANT: GUILLET, JEAN GERARD

; TITLE OF INVENTION: LIPOPEPTIDES CONTAINING AN INTERFERON FRAGMENT AND USES

; FILE REFERENCE: USB-97-AU-IN

; CURRENT APPLICATION NUMBER: US/09/601,729

; FILING DATE: 2000-11-20

; PRIOR APPLICATION NUMBER: PCT/FR99/00259

; PRIOR FILING DATE: 1999-02-05

; PRIOR APPLICATION NUMBER: 98 01439

; PRIOR FILING DATE: 1998-02-06

; NUMBER OF SEQ ID NOS: 281

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 102

; LENGTH: 9

; TYPE: PPT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: Synthetic

US-09-601-729-102

Query Match 49.0%; Score 24; DB 2; Length 9;

Best Local Similarity 80.0%; Pred. No. 4.6e+05;

Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 APPVH 7

Db 3 APPQH 7

RESULT 35

US-08-188-228-1

; Sequence 1, Application US/08188228

; Patent No. 5597725

; GENERAL INFORMATION:

; APPLICANT: Suzuki, Shintaro

; TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS

; NUMBER OF SEQUENCES: 62

; CORRESPONDENCE ADDRESS:

ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Borun
STREET: 6300 Sears Tower, 233 S. Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/188,228
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/049,460
FILING DATE: 19 APR 1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/872,643
FILING DATE: 17 APR 1992
ATTORNEY/AGENT INFORMATION:
NAME: No. 5597725and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31340
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 6 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-188-228-1

Query Match 46.9%; Score 23; DB 1; Length 6;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0;

Qy 2 TAPP 5
Db 1 TAPP 4

RESULT 36
US-08-332-643-1
Sequence 1, Application US/08332643
Patent No. 5639634
GENERAL INFORMATION:
APPLICANT: Suzuki, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 56
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Bicknell
STREET: Two First National Plaza, 20 South Clark
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,643
FILING DATE:
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/872,643
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: No. 5639634and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 27866/30795
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 346-5750
TELEFAX: (312) 984-9740
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 6 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-332-643-1

Query Match 46.9%; Score 23; DB 1; Length 6;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0;

Qy 2 TAPP 5
Db 1 TAPP 4

RESULT 37
US-08-332-638-1
Sequence 1, Application US/08332638
Patent No. 5646250
GENERAL INFORMATION:
APPLICANT: Suzuki, Shintaro
TITLE OF INVENTION: CADHERIN MATERIALS AND METHODS
NUMBER OF SEQUENCES: 62
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSEE: Borun
STREET: 6300 Sears Tower, 233 S. Wacker Drive
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/332,638
FILING DATE: 01-NOV-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/872,643
FILING DATE: 17 APR 1992
APPLICATION NUMBER: US/08/049,460
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: No. 5646250and, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 31340
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 474-6300
TELEFAX: (312) 474-0448
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 6 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-332-638-1

Query Match 46.9%; Score 23; DB 1; Length 6;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
|:|:|
DB 1 TAPP 4

RESULT 38
US-09-005-215-29
; Sequence 29, Application US/09005215
; Patent No. 6172043
; GENERAL INFORMATION:
; APPLICANT: Ingram, Vernon M.
; APPLICANT: Blanchard, Barbara J.
; TITLE OF INVENTION: TREATMENTS FOR NEUROTOXICITY IN ALZHEIMER'S
; TITLE OF INVENTION: DISEASE CAUSED BY -AMYLOID PEPTIDES
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: WOLF, GREENFIELD & SACKS, P.C.
; STREET: 600 ATLANTIC AVENUE
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 02210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/005,215
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/035,847
; FILING DATE: 10-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/960,188
; FILING DATE: 29-OCT-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Gates, Edward R.
; REGISTRATION NUMBER: 31,616
; REFERENCE/DOCKET NUMBER: M0656/7035
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-720-3500
; TELEFAX: 617-720-2441
; INFORMATION FOR SEQ ID NO: 29:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 6 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO

Query Match 46.9%; Score 23; DB 2; Length 6;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPP 5
|:|:|
DB 1 SSAPP 5

RESULT 39
US-09-706-574A-29
; Sequence 29, Application US/09706574A
; Patent No. 6942963
; GENERAL INFORMATION:

; APPLICANT: Ingram, Vernon M.
; APPLICANT: Blanchard, Barbara J.
; TITLE OF INVENTION: TREATMENTS FOR NEUROTOXICITY IN ALZHEIMER'S DISEASE CAUSED BY
; TITLE OF INVENTION: a-AMYLOID PEPTIDES
; FILE REFERENCE: M0656/7060
; CURRENT APPLICATION NUMBER: US/09/706,574A
; CURRENT FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: US 60/035,847
; PRIOR FILING DATE: 1997-01-10
; PRIOR APPLICATION NUMBER: US 08/960,188
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: US 09/005,215
; PRIOR FILING DATE: 1998-01-09
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 29
; LENGTH: 6
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Peptide
US-09-706-574A-29

Query Match 46.9%; Score 23; DB 2; Length 6;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPP 5
|:|:|
DB 1 SSAPP 5

RESULT 40
US-09-192-854-91
; Sequence 91, Application US/09192854
; Patent No. 6696245
; GENERAL INFORMATION:
; APPLICANT: Winter, Greg
; APPLICANT: Tomlinson, Ian
; TITLE OF INVENTION: Methods for Selecting Functional Peptides
; FILE REFERENCE: 3789/72916
; CURRENT APPLICATION NUMBER: US/09/192,854
; CURRENT FILING DATE: 1998-11-17
; EARLIER APPLICATION NUMBER: 60/066,729
; EARLIER FILING DATE: 1997-11-21
; NUMBER OF SEQ ID NOS: 212
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 91
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-192-854-91

Query Match 46.9%; Score 23; DB 2; Length 7;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
|:|:|
DB 1 TAPP 4

RESULT 41
US-09-511-939-159
; Sequence 159, Application US/09511939
; Patent No. 6846634
; GENERAL INFORMATION:
; APPLICANT: Tomlinson, Ian M
; APPLICANT: Winter, Gregory
; TITLE OF INVENTION: Method to Screen Phage Display Libraries with Different Ligands
; FILE REFERENCE: 8039/1070
; CURRENT APPLICATION NUMBER: US/09/511,939
; CURRENT FILING DATE: 2002-04-10

```
; PRIOR APPLICATION NUMBER: GB 9722131.1
; PRIOR FILING DATE: 1997-10-20
; PRIOR APPLICATION NUMBER: US 60/065,248
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: US 60/066,729
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: PCT/GB98/03135
; PRIOR FILING DATE: 1998-10-20
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 159
; LENGTH: 7
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-511-939-159

Query Match          46.9%; Score 23; DB 2; Length 7;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAPP 5
   ||||
Db 1 TAPP 4

RESULT 42
US-08-615-181-21
; Sequence 21, Application US/08615181
; Patent No. 5756666
; GENERAL INFORMATION:
; APPLICANT: MASAFUMI, TAKIGUCHI
; APPLICANT: MIWA, KIYOSHI
; TITLE OF INVENTION: PEPTIDES CAPABLE OF INDUCING IMMUNE
; TITLE OF INVENTION: RESPONSE TO HIV AND ANTI-AIDS AGENT FOR PREVENTING AND
; NUMBER OF SEQUENCES: 115
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT,
; ADDRESSEE: P.C.
; STREET: 1755 S. JEFFERSON DAVIS HIGHWAY, SUITE 400
; CITY: ARLINGTON
; STATE: VA
; COUNTRY: USA
; ZIP: 22202
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/615,181
; FILING DATE: 04-APR-1996
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/JP94/01756
; FILING DATE: 19-OCT-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 261302/1993
; FILING DATE: 19-OCT-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: OBLON, NORMAN F.
; REGISTRATION NUMBER: 24,618
; REFERENCE/DOCKET NUMBER: 10-796-0 PCT
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 703-413-3000
; TELEFAX: 703-413-2220
; INFORMATION FOR SEQ ID NO: 21:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 8 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

; ORIGINAL SOURCE:
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
; US-08-615-181-81

Query Match          46.9%; Score 23; DB 1; Length 8;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHNV 9
   ||||
Db 2 PVHGV 6

; ORIGINAL SOURCE:
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
; US-08-615-181-21

Query Match          46.9%; Score 23; DB 1; Length 8;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHNV 9
   ||||
Db 2 PVHGV 6
```

RESULT 44

US-08-477-860C-8
 ; Sequence 8, Application US/08477860C
 ; Patent No. 6010873
 ; GENERAL INFORMATION:
 ; APPLICANT: Atkinson, John P.
 ; APPLICANT: Hourcade, Dennis
 ; APPLICANT: Krych, Malgorzata
 ; TITLE OF INVENTION: Modified Complement System Regulators
 ; NUMBER OF SEQUENCES: 14
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Patrea L. Pabst
 ; STREET: 2800 One Atlantic Center, 1201 West Peachtree
 ; STREET: Street
 ; CITY: Atlanta
 ; STATE: Georgia
 ; COUNTRY: US
 ; ZIP: 30309-3450
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/477,860C
 ; FILING DATE: 7-JUN-1995
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/210,266
 ; FILING DATE: 18-MAR-1994
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/695,514
 ; FILING DATE: 03-MAY-1991
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Pabst, Patrea L.
 ; REGISTRATION NUMBER: 31,284
 ; REFERENCE/DOCKET NUMBER: WU 101 DIV
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (404)873-8794
 ; TELEFAX: (404)873-8795
 ; INFORMATION FOR SEQ ID NO: 8:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 8 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 3
 ; OTHER INFORMATION: /note= Xaa can be Lys or Arg
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 6
 ; OTHER INFORMATION: /note= Xaa can be Ile, Leu, or Val
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 8
 ; OTHER INFORMATION: /note= Xaa can be Gln or Asn
 ; US-08-477-860C-8

Query Match 46.9%; Score 23; DB 2; Length 8;
 Best Local Similarity 80.0%; Pred. No. 4.6e+05;
 Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAPP 5
 Db 1 STXPP 5

RESULT 45

US-08-444-818-341
 ; Sequence 341, Application US/08444818

; Patent No. 6150087
 ; GENERAL INFORMATION:
 ; APPLICANT: Chien, David Y.
 ; APPLICANT: Rutter, William J.
 ; TITLE OF INVENTION: NANBV Diagnostics and Vaccines
 ; NUMBER OF SEQUENCES: 777
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Chiron Corporation
 ; STREET: 4560 Horton Street
 ; CITY: Emeryville
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94608-2916
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/444,818
 ; FILING DATE:
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/403,590
 ; FILING DATE: 14-MAR-1995
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Harbin, Alisa A.
 ; REGISTRATION NUMBER: 33,895
 ; REFERENCE/DOCKET NUMBER: 0110.002
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (508)359-3876
 ; TELEFAX: (508)359-3885
 ; INFORMATION FOR SEQ ID NO: 341:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 8 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; US-08-444-818-341

Query Match 46.9%; Score 23; DB 2; Length 8;
 Best Local Similarity 57.1%; Pred. No. 4.6e+05;
 Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 TAPPVHN 8
 Db 1 TRPPLGN 7

RESULT 46

US-10-185-815A-76
 ; Sequence 76, Application US/10185815A
 ; Patent No. 6916789
 ; GENERAL INFORMATION:
 ; APPLICANT: Elan Corporation, plc
 ; APPLICANT: O'Mahony, Daniel
 ; APPLICANT: Lambkin, Imelda
 ; APPLICANT: Higgins, Lisa
 ; TITLE OF INVENTION: Peyer's Patch And/Or M-Cell Targeting Ligands
 ; FILE REFERENCE: P26,480-A USA
 ; CURRENT APPLICATION NUMBER: US/10/185,815A
 ; CURRENT FILING DATE: 2002-06-28
 ; PRIOR APPLICATION NUMBER: 60/302,591
 ; PRIOR FILING DATE: 2001-07-02
 ; NUMBER OF SEQ ID NOS: 100
 ; SOFTWARE: Patentin version 3.1
 ; SEQ ID NO 76
 ; LENGTH: 8
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Segment of xenla epithelial-cadherin precursor (e-cadherin)

US-10-185-815A-76

Query Match 46.9%; Score 23; DB 2; Length 8;
Best Local Similarity 100.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 TAPP 5
|||
Db 4 TAPP 7

RESULT 47

US-07-841-662-31
; Sequence 31, Application US/07841662
; Patent No. 5314813
; GENERAL INFORMATION:
; APPLICANT: Peterson, Per A
; APPLICANT: Jackson, Michael
; APPLICANT: Lenglade-Demoyen, Pierre
; TITLE OF INVENTION: IN VITRO ACTIVATION OF CYTOTOXIC T CELLS
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: The Scripps Research Institute
; STREET: 10666 No. 5314813th Torrey Pines Road, TPC 8
; CITY: La Jolla
; STATE: California
; COUNTRY: USA
; ZIP: 92037

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/841,662
; FILING DATE: 19920219
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Logan, April

REGISTRATION NUMBER: 33,950
; REFERENCE/DOCKET NUMBER: SPFO001P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 554-2937
; TELEFAX: (619) 554-6312
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: AMINO ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal

US-07-841-662-31

Query Match 46.9%; Score 23; DB 1; Length 9;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
|||
Db 5 PVHGV 9

RESULT 48

US-08-209-797-31
; Sequence 31, Application US/08209797
; Patent No. 5529921
; GENERAL INFORMATION:

; APPLICANT: Peterson, Per A
; APPLICANT: Jackson, Michael
; APPLICANT: Lenglade-Demoyen, Pierre
; TITLE OF INVENTION: IN VITRO ACTIVATION OF CYTOTOXIC T CELLS
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: The Scripps Research Institute
; STREET: 10666 No. 5529921th Torrey Pines Road, TPC 8
; CITY: La Jolla
; STATE: California
; COUNTRY: USA
; ZIP: 92037

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/209,797
; FILING DATE: 10-MAR-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/841,662
; FILING DATE: 19-FEB-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Logan, April
; REGISTRATION NUMBER: 33,950
; REFERENCE/DOCKET NUMBER: SPFO001P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (619) 554-2937
; TELEFAX: (619) 554-6312
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: internal

US-08-209-797-31

Query Match 46.9%; Score 23; DB 1; Length 9;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
|||
Db 5 PVHGV 9

RESULT 49

US-08-146-145-19
; Sequence 19, Application US/08146145
; Patent No. 5747269
; GENERAL INFORMATION:
; APPLICANT: Rammensee, Hans-Georg
; APPLICANT: Falk, Kirsten
; APPLICANT: R tzechke, Olaf
; APPLICANT: Stevanovic, Stefan
; APPLICANT: Jung, G nther
; TITLE OF INVENTION: DETERMINATION OF PEPTIDE MOTIFS ON MHC
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Nikaido, Marmelstein, Murray & Oram
; STREET: 655 Fifteenth Street N.W. Suite 330
; CITY: Washington
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005-5701
; COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/146,145
FILING DATE: 17-NOV-1993
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kitts, Monica C.
REGISTRATION NUMBER: 36,105
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)638-5000
TELEFAX: (202)638-4810
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-146-145-19

Query Match 46.9%; Score 23; DB 1; Length 9;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
Db 5 PVHGV 9

RESULT 50
US-08-669-685-31
Sequence 31, Application US/08669685
Patent No. 5827737
GENERAL INFORMATION:
APPLICANT: Peterson, Per A
APPLICANT: Jackson, Michael
APPLICANT: Lenglade-Demoyen, Pierre
TITLE OF INVENTION: IN VITRO ACTIVATION OF CYTOTOXIC T CELLS
NUMBER OF SEQUENCES: 36
CORRESPONDENCE ADDRESS:
ADDRESSEE: The Scripps Research Institute
STREET: 10666 No. 5827737th Torrey Pines Road, TPC 8
CITY: La Jolla
STATE: California
COUNTRY: USA
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/669,685
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/209,797
FILING DATE: 10-MAR-1994
APPLICATION NUMBER: US 07/841,662
FILING DATE: 19-FEB-1992
ATTORNEY/AGENT INFORMATION:
NAME: Logan, April
REGISTRATION NUMBER: 33,950
REFERENCE/DOCKET NUMBER: SPF0001P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 554-2937
TELEFAX: (619) 554-6312
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
LENGTH: 9 amino acids
TYPE: amino acid

STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: internal
US-08-669-685-31

Query Match 46.9%; Score 23; DB 1; Length 9;
Best Local Similarity 80.0%; Pred. No. 4.6e+05;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVHNV 9
Db 5 PVHGV 9

Search completed: February 24, 2006, 10:19:37
Job time : 54 secs

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OM protein - protein search, using sw model

Run on: February 24, 2006, 10:11:10 ; Search time 226 Seconds
(without alignments)
28.096 Million cell updates/sec

Title: US-10-019-513-1
Perfect score: 49
Sequence: 1 STAPPVHV 9

Scoring table: BL08UM62
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 1766

Minimum DB seq length: 0
Maximum DB seq length: 9

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : UniProt_05.80.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	18	36.7	8	1	FUSS_FUSSO
3	18	36.7	8	2	Q4VS04 MANSE
4	18	36.7	8	2	Q92205 HEPC
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10	16	32.7	8	2	Q6Y2F2 CITSI
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12	16	32.7	9	2	Q9P8E5_KLUULA
13	16	32.7	9	2	Q71UR3_HUMAN
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21	16	32.7	9	2	Q76FV1_PLOCA
22	16	32.7	9	2	Q64972_AVEVR
23	15	30.6	7	2	Q63492_BIOOC
24	15	30.6	8	1	ACI_THUAL
25	15	30.6	8	1	PKK2_PERAM
26	15	30.6	8	2	Q6J0R5_PARLI
27	15	30.6	8	2	Q7M1V6_SOLTU
28	15	30.6	9	2	Q9UCS8_HUMAN
29	15	30.6	9	2	Q16605_HUMAN
30	15	30.6	9	2	Q7M3S5_9TRYP
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33	15	30.6	9	2	Q4YFU0_PLASMODIUM
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47	15	30.6	9	2	Q8HSL5_9FLOR
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49	15	30.6	9	2	Q8ME56_9RHOD
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51	15	30.6	9	2	Q8W7T9_BOSCA
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75	14	28.6	7	2	P92403_LOPEL
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83	14	28.6	8	1	NGIF_RAT
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86	14	28.6	8	2	Q699J0_BETVU
87	14	28.6	8	2	Q849P4_SALDE
88	14	28.6	8	2	Q84156_9POXV
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92	14	28.6	9	1	KNL3_CYPDO
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94	14	28.6	9	2	Q7RE58_PLAYO
95	14	28.6	9	2	Q4YFC4_PLABE
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99	14	28.6	9	2	Q7YK04_9PABA
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104	14	28.6	9	2	Q8QRR6_9CORO

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Q5G6L3	rhinopoma h
Q81962	caloglossa
Q81964	caloglossa
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Q81968	caloglossa
Q6EU8	gerbera hyb
Q76F57	hypnea japo
Q8HB43	gracilaria
Q8HB44	gracilaria
Q8HB45	gracilaria
Q8HRJ8	ptilophora
Q8HRK0	gracilaria
Q8HSL0	murravella
Q8HSL5	spyridia fi
Q8MDU2	hypnea sp.
Q8ME56	porphyra mi
Q8ME58	porphyra li
Q8W7T9	bostrychia
Q8W875	bostrychia
Q9MVU2	caloglossa
Q9T387	bostrychia
Q9T389	caloglossa
Q9TJ85	caloglossa
Q9TLD0	bostrychia
Q78337	caloglossa
Q71066	canine diet
Q92766	canine diet
Q90359	barley mild
P38642	mus musculus
P38455	pachymedusa
P92221	bromus iner
P92226	crithopsis
P92372	haynaldia v
P92381	hordeum bra
P92385	hordeum mar
P92387	henradia p
P92390	heteranthel
P92393	hordeum vul
P92403	lophopyrum
P92421	psathyrosta
P92425	pseudoroegn
P92427	peridactyon
P92430	aegilops ta
P92440	thinopyrum
P92442	taeniatheru
P41841	calliphora
P82598	rattus norv
Q13591	saccharomyc
Q6U7R2	cryptococcu
Q699J0	beta vulgar
Q849P4	salmonella
Q84156	orf virus
Q71254	rana nigrom
P82281	macrobrachi
P83058	bombina var
P83659	cyphononyx
Q9TW0	anthopleura
Q4YFC4	plasmodium
Q7M2M9	bos taurus
Q5IA44	philodendro
P82429	nicotiana t
Q7YK04	acacia berl
Q9MVU1	caloglossa
P82568	streptococ
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Q8QRR5	transmissib
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105	14	28.6	9	2	P84497	TRASC	P84497	trachemys s	178	12	24.5	9	2	Q7JIS9	LAGAC	Q7JIS9	lagenorhync
106	14	28.6	9	2	Q6I75A	CYNPY	Q6I75A	cynops pyrr	179	12	24.5	9	2	Q7JIT0	LAGAC	Q7JIT0	lagenorhync
107	14	28.6	9	2	Q7LZ50	CHICK	Q7LZ50	gallus gall	180	12	24.5	9	2	Q7JIT1	LAGAC	Q7JIT1	lagenorhync
108	14	28.6	9	2	Q7LZJ8	RANTE	Q7LZJ8	rana tempor	181	12	24.5	9	2	Q9GJV1	LAGOB	Q9GJV1	lagenorhync
109	14	28.6	9	2	Q9PRJ4	LEPOS	Q9PRJ4	lepisosteus	182	12	24.5	9	2	Q9GJV2	LAGOB	Q9GJV2	lagenorhync
110	14	28.6	9	2	Q7LZ17	9NEOB	Q7LZ17	heleophryne	183	12	24.5	9	2	Q9GJV3	LAGOB	Q9GJV3	lagenorhync
111	13	26.5	6	1	MAF SCHMA		P84575	schistosoma	184	12	24.5	9	2	Q5DQJ7	9LILI	Q5DQJ7	nenga pumil
112	13	26.5	7	1	CHOX ALCSP		P16101	alcaligenes	185	12	24.5	9	2	Q5DQK7	9LILI	Q5DQK7	hydryastele
113	13	26.5	7	1	UC24 MAIZE		P86630	zea mays (m	186	12	24.5	9	2	Q5DQM6	9LILI	Q5DQM6	gronophyllu
114	13	26.5	7	2	Q8QMS3	9ENTR	Q8QMS3	actinobacill	187	12	24.5	9	2	Q5DQM8	9LILI	Q5DQM8	gronophyllu
115	13	26.5	7	2	Q8QMS3	9ENTR	Q8QMS3	klebsiella	188	12	24.5	9	2	Q5DQNO	9LILI	Q5DQNO	gronophyllu
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117	13	26.5	8	2	Q6LD47	HUMAN	Q6LD47	homo sapien	190	12	24.5	9	2	Q5DQNE	9LILI	Q5DQNE	areca catec
118	13	26.5	8	2	Q42507	WHEAT	Q42507	tritium ae	191	12	24.5	9	2	Q5DQPI	9LILI	Q5DQPI	manicaria s
119	13	26.5	8	2	Q8L802	MAIZE	Q8L802	zea mays (m	192	12	24.5	9	2	Q5DQF2	9LILI	Q5DQF2	leopoldinia
120	13	26.5	8	2	P83532	LACSN	P83532	lactobacill	193	12	24.5	9	2	Q5DQF3	9LILI	Q5DQF3	kentloppsis
121	13	26.5	8	2	Q7X4Q5	NODSP	Q7X4Q5	nodularia s	194	12	24.5	9	2	Q5DQPA	9LILI	Q5DQPA	iguanura wa
122	13	26.5	8	2	Q9R9E0	BACSU	Q9R9E0	bacillus su	195	12	24.5	9	2	Q5DQPE	9LILI	Q5DQPE	ammandra de
123	13	26.5	8	2	Q90345	9FLAV	Q90345	gb virus c/	196	12	24.5	9	2	Q70Y80	9LAMI	Q70Y80	plectranthu
124	13	26.5	9	1	PKX2 MUSDO		P84355	musca domes	197	12	24.5	9	2	Q70YA2	9LAMI	Q70YA2	alvesia ros
125	13	26.5	9	2	Q67AQ6	HUMAN	Q67AQ6	homo sapien	198	12	24.5	9	2	Q6VFO2	VIBFI	Q6VFO2	vibrio fisc
126	13	26.5	9	2	Q67AR0	HUMAN	Q67AR0	homo sapien	199	12	24.5	9	2	Q9R7H9	HABIN	Q9R7H9	haemophilus
127	13	26.5	9	2	Q67AR1	HUMAN	Q67AR1	homo sapien	200	12	24.5	9	2	Q7M0H1	MOUSE	Q7M0H1	mus musculu
128	13	26.5	9	2	Q67AS0	HUMAN	Q67AS0	homo sapien	201	12	24.5	9	2	Q8CG39	RAT	Q8CG39	rattus norv
129	13	26.5	9	2	Q67AS3	HUMAN	Q67AS3	homo sapien	202	12	24.5	9	2	Q50LI0	XENLA	Q50LI0	xenopus lae
130	13	26.5	9	2	Q7HRU6	NODSP	Q7HRU6	nodularia s	203	12	24.5	9	2	Q4VN46	FUGRU	Q4VN46	fugu rubrip
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132	12	24.5	5	1	EIO4 LITRU		P82100	litoria rub	205	11	22.4	4	1	YLM1 YEAST		YLM1 YEAST	saccharomyc
133	12	24.5	5	1	SUGA ACHDO		P19991	acheta dome	206	11	22.4	5	1	BPP7 BOTIN		BPP7 BOTIN	bothriops in
134	12	24.5	8	1	ALL1_CVDPO		P82152	cydia pomon	207	11	22.4	6	1	CIP2 MYTED		CIP2 MYTED	mytilus edu
135	12	24.5	8	1	KIN15 PERAM		P82689	periplaneta	208	11	22.4	7	2	Q8MF76	9ASTR	Q8MF76	taraxacum (
136	12	24.5	8	1	LCK1 LEUMA		P21140	leucophaea	209	11	22.4	7	2	P72081	NOCLA	P72081	nocardia la
137	12	24.5	8	2	Q7Z6G0	HUMAN	Q7Z6G0	homo sapien	210	11	22.4	7	2	Q66205	9COCO	Q66205	transmissaib
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139	12	24.5	8	2	Q9UHK1	HUMAN	Q9UHK1	homo sapien	212	11	22.4	8	1	B44K FORGI		B44K FORGI	porphyromon
140	12	24.5	8	2	Q53TM6	HUMAN	Q53TM6	homo sapien	213	11	22.4	8	1	CAP4 CANAL		CAP4 CANAL	candida alb
141	12	24.5	8	2	Q28866	MEGNO	Q28866	megaptera n	214	11	22.4	8	1	CLP THICU		CLP THICU	thiobacilli
142	12	24.5	8	2	Q9BF98	HYLCO	Q9BF98	hylobates c	215	11	22.4	8	1	FAR4 MACRS		FAR4 MACRS	macrobacteri
143	12	24.5	8	2	Q9BFA0	MACOMU	Q9BFA0	macaca mula	216	11	22.4	8	1	RS7 MYCIT		RS7 MYCIT	mycobacteri
144	12	24.5	8	2	Q9GMH3	LAGOB	Q9GMH3	lagenorhync	217	11	22.4	8	1	UPAI HUMAN		UPAI HUMAN	homo sapien
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146	12	24.5	8	2	Q5DQK1	9LILI	Q5DQK1	loxococcus	219	11	22.4	8	2	Q96QF9	HUMAN	Q96QF9	homo sapien
147	12	24.5	8	2	Q5DQK8	9LILI	Q5DQK8	hydryastele	220	11	22.4	8	2	O02032	LYTPI	O02032	lytechinus
148	12	24.5	8	2	Q5DQK2	9LILI	Q5DQK2	gubulia cos	221	11	22.4	8	2	Q8MUN6	9NEOP	Q8MUN6	heliconius
149	12	24.5	8	2	Q5DQMT	9LILI	Q5DQMT	gronophyllu	222	11	22.4	8	2	QSTRX8	BOVIN	QSTRX8	bos taurus
150	12	24.5	8	2	Q5DQN2	9LILI	Q5DQN2	gronophyllu	223	11	22.4	8	2	Q70KG9	PIG	Q70KG9	sus scrofa
151	12	24.5	8	2	Q5DQN3	9LILI	Q5DQN3	areca trian	224	11	22.4	8	2	O19957	GOSHI	O19957	gossypium h
152	12	24.5	8	2	Q5DQP5	9LILI	Q5DQP5	cyphosperma	225	11	22.4	8	2	Q7M1U0	ORYSA	Q7M1U0	oryza sativ
153	12	24.5	8	2	Q6Z269	9CARY	Q6Z269	silene ajan	226	11	22.4	8	2	Q9MSX1	9ASTR	Q9MSX1	jurinea hum
154	12	24.5	8	2	Q70Y68	9LAMI	Q70Y68	prostanther	227	11	22.4	8	2	Q9SB24	TOBAC	Q9SB24	nicotiana t
155	12	24.5	8	2	Q70Y88	9LAMI	Q70Y88	platostoma	228	11	22.4	8	2	Q4QYN7	9POAL	Q4QYN7	saccharum s
156	12	24.5	8	2	P83158	ANASL	P83158	anabaena sp	229	11	22.4	8	2	Q4QYN9	9POAL	Q4QYN9	saccharum e
157	12	24.5	8	2	Q934S4	THIFE	Q934S4	thiobacilli	230	11	22.4	8	2	Q4QYP2	9POAL	Q4QYP2	saccharum b
158	12	24.5	8	2	Q9RQ49	9ENTR	Q9RQ49	buchnera ap	231	11	22.4	8	2	Q4QYP3	9POAL	Q4QYP3	saccharum b
159	12	24.5	8	2	Q9RQ57	9ENTR	Q9RQ57	buchnera ap	232	11	22.4	8	2	Q4QYP5	9POAL	Q4QYP5	saccharum r
160	12	24.5	8	2	Q44463	9RHIZ	Q44463	rhizobiales	233	11	22.4	8	2	Q4QYP6	SACOF	Q4QYP6	saccharum o
161	12	24.5	8	2	Q5G852	9GRUI	Q5G852	aramides yp	234	11	22.4	8	2	Q56246	BACP3	Q56246	bacillus ps
162	12	24.5	8	2	Q90498	ERYGO	Q90498	erythrura g	235	11	22.4	8	2	Q5M6L9	CAMJE	Q5M6L9	campylobact
163	12	24.5	8	2	Q91098	MANME	Q91098	manorina me	236	11	22.4	8	2	Q7M0L0	CLOST	Q7M0L0	clostridium
164	12	24.5	9	1	Q6VMC6	9PASS	Q6VMC6	serilophus	237	11	22.4	8	2	Q7M041	RAT	Q7M041	rattus norv
165	12	24.5	9	1	ALC CHIRE		P83678	chlamydomon	238	11	22.4	8	2	Q8K327	MOUSE	Q8K327	mus musculu
166	12	24.5	9	1	BSF43 SERPL		P83375	serratia pl	239	11	22.4	8	2	Q5XPV7	MOUSE	Q5XPV7	mus musculu
167	12	24.5	9	1	CB22 SPOL		Q92K9	spinacia ol	240	11	22.4	8	2	Q89496	9COCO	Q89496	murine hepa
168	12	24.5	9	1	FLAA2 TREHY		P80159	treponema h	241	11	22.4	8	2	Q641X4	FUNCE	Q641X4	fundulus he
169	12	24.5	9	2	Q7M471	VEROR	Q7M471	vespa orien	242	11	22.4	8	2	Q8AWV7	ANAPL	Q8AWV7	anas platyr
170	12	24.5	9	2	Q9TWX7	MANSE	Q9TWX7	manduca sex	243	11	22.4	8	2	Q8AWV8	9AVES	Q8AWV8	cygnus colu
171	12	24.5	9	2	Q7BBU6	PLAYO	Q7BBU6	plasmodium	244	11	22.4	8	2	Q8AWV9	ANSCC	Q8AWV9	anser caeru
172	12	24.5	9	2	Q7JIS3	LAGOB	Q7JIS3	lagenorhync	245	11	22.4	8	2	Q8AWW0	COSCO	Q8AWW0	coscoroba c
173	12	24.5	9	2	Q7JIS4	LAGOL	Q7JIS4	lagenorhync	246	11	22.4	8	2	Q4FU45	9CICH	Q4FU45	lepidolamp
174	12	24.5	9	2	Q7JIS5	LAGOL	Q7JIS5	lagenorhync	247	11	22.4	8	2	Q85562	MLVMO	Q85562	moloney mur
175	12	24.5	9	2	Q7JIS6	LAGOL	Q7JIS6	lagenorhync	248	11	22.4	9	1	ALL10 CARMA		ALL10 CARMA	carcinus ma
176	12	24.5	9	2	Q7JIS7	LAGOL	Q7JIS7	lagenorhync	249	11	22.4	9	1	FAR2 PANRE		FAR2 PANRE	panagrellus
177	12	24.5	9	2	Q7JIS8	LAGOL	Q7JIS8	lagenorhync	250	11	22.4	9	1	FAR5_CALVO		FAR5_CALVO	calliphora

251	11	22.4	9	1	ISOT_CYPCA	P42993	cyprinus ca	324	10	20.4	6	1	TRPI_PSEPU	P36414	pseudomonas
252	11	22.4	9	1	OXYA_SCYCA	P42996	scyllorhinu	325	10	20.4	6	1	UN06_CLOPA	P81351	clostridium
253	11	22.4	9	1	OXYF_SCYCA	P42997	scyllorhinu	326	10	20.4	6	1	Vp19_HVLIK	P23210	human herpe
254	11	22.4	9	1	OXYT_RAJCL	P42994	raja clavata	327	10	20.4	7	1	CARP_MYTED	P10420	mytilus edu
255	11	22.4	9	1	OXYV_SQUAC	P43000	squalus sca	328	10	20.4	7	1	HCVB_CONCC	P84620	concholepas
256	11	22.4	9	1	TALI_PICIA	P17440	pichia jadi	329	10	20.4	7	1	TY51_LITRU	P82065	litoria rub
257	11	22.4	9	1	TAL3_PICUA	P17441	pichia jadi	330	10	20.4	7	2	Q28742_RABIT	Q28742	oryctolagus
258	11	22.4	9	1	TKC1_CALVO	P41517	calliphora	331	10	20.4	8	1	ALL7_CARMA	P81809	carcinus ma
259	11	22.4	9	1	TRP4_LEUMA	P81736	leucophaea	332	10	20.4	8	1	DYS4_LIMSA	P82082	limnodynast
260	11	22.4	9	1	Q6LDB5_HUMAN	Q61db5	homo sapien	333	10	20.4	8	1	KINI1_PERAM	P82685	periplaneta
261	11	22.4	9	2	Q6LE76_HUMAN	Q6le76	homo sapien	334	10	20.4	8	1	KINI3_PERAM	P82687	periplaneta
262	11	22.4	9	2	Q70SM2_HUMAN	Q70sm2	homo sapien	335	10	20.4	8	1	UC26_MAIZE	P80632	zea mays (m
263	11	22.4	9	2	Q7M4R6_HUMAN	Q7M4r6	homo sapien	336	10	20.4	8	1	VGLG_HHV2B	P81780	human herpe
264	11	22.4	9	2	Q86SFO_HUMAN	Q86sf0	homo sapien	337	10	20.4	8	1	VTIN_ALOVR	P83233	aloe vera (
265	11	22.4	9	2	Q9H4M8_HUMAN	Q9H4m8	homo sapien	338	10	20.4	8	2	Q15894_HUMAN	Q15894	homo sapien
266	11	22.4	9	2	Q9JMC5_HUMAN	Q9Jmc5	homo sapien	339	10	20.4	8	2	Q15898_HUMAN	Q15898	homo sapien
267	11	22.4	9	2	Q9UMF3_HUMAN	Q9Umf3	homo sapien	340	10	20.4	8	2	Q16468_HUMAN	Q16468	homo sapien
268	11	22.4	9	2	P82208_BOMMO	P82208	bombyx mori	341	10	20.4	8	2	Q5MXD1_TRYCR	Q5mxd1	trypanosoma
269	11	22.4	9	2	Q7M3L3_PENVA	Q7M3l3	penaeus van	342	10	20.4	8	2	Q86BS9_STRPU	Q86bs9	strongyloce
270	11	22.4	9	2	Q7M2N7_BOSIN	Q7M2n7	bos indicus	343	10	20.4	8	2	Q7RHY3_PLAYO	Q7rhy3	plasmodium
271	11	22.4	9	2	Q6QVK7_PRAVU	Q6qvk7	phaseolus v	344	10	20.4	8	2	Q4YJG3_PLABE	Q4yJg3	plasmodium
272	11	22.4	9	2	Q9FXL0_LILLO	Q9fxl0	lilium long	345	10	20.4	8	2	Q6R4Q8_BUBBU	Q6r4q8	bubalus bub
273	11	22.4	9	2	Q56SS9_SAMCA	Q56ss9	sambucus ca	346	10	20.4	8	2	Q8WNS1_BOVIN	Q8wns1	bos taurus
274	11	22.4	9	2	Q56ST0_9DIPS	Q56st0	viburnum ut	347	10	20.4	8	2	Q7M390_BALAC	Q7m390	balaeopter
275	11	22.4	9	2	Q56ST1_9DIPS	Q56st1	viburnum ur	348	10	20.4	8	2	Q37854_BPR17	Q37854	bacterioph
276	11	22.4	9	2	Q56ST2_9DIPS	Q56st2	viburnum tr	349	10	20.4	8	2	Q6JVP1_9ASTR	Q6jvp1	wamalachita
277	11	22.4	9	2	Q56ST3_VIBOP	Q56st3	viburnum op	350	10	20.4	8	2	Q71V47_PSEPU	Q71v47	pseudomonas
278	11	22.4	9	2	Q56ST4_9DIPS	Q56st4	viburnum ti	351	10	20.4	8	2	Q7AUJ4_9GAMM	Q7auj4	acinetobact
279	11	22.4	9	2	Q56ST5_9DIPS	Q56st5	viburnum su	352	10	20.4	8	2	Q7M066_MOUSE	Q7m066	mus musculu
280	11	22.4	9	2	Q56ST6_9DIPS	Q56st6	viburnum st	353	10	20.4	8	2	Q80XV8_9MURI	Q80xv8	rattus sp.
281	11	22.4	9	2	Q56ST7_9DIPS	Q56st7	viburnum si	354	10	20.4	8	2	Q99MNO_MOUSE	Q99mno	mus musculu
282	11	22.4	9	2	Q56ST8_9DIPS	Q56st8	viburnum sa	355	10	20.4	8	2	Q9MD43_RAT	Q9md43	rattus norv
283	11	22.4	9	2	Q56ST9_9DIPS	Q56st9	viburnum ru	356	10	20.4	8	2	Q6XFW6_9PASE	Q6xfw6	anthrepes
284	11	22.4	9	2	Q56SU1_9DIPS	Q56su1	viburnum pr	357	10	20.4	9	1	CB2C_SPIOL	Q9-211	spinacia ol
285	11	22.4	9	2	Q56SU2_9DIPS	Q56su2	viburnum pl	358	10	20.4	9	1	PAR3_PENMO	P83318	penaeus mon
286	11	22.4	9	2	Q56SU3_9DIPS	Q56su3	viburnum od	359	10	20.4	9	1	MGMT_BOVIN	P29177	bos taurus
287	11	22.4	9	2	Q56SU4_9DIPS	Q56su4	viburnum nu	360	10	20.4	9	1	OXYA_SQUAC	P42999	squalus aca
288	11	22.4	9	2	Q56SU5_9DIPS	Q56su5	viburnum me	361	10	20.4	9	1	OXYT_BUPRE	P42995	bufo regula
289	11	22.4	9	2	Q56SU6_9DIPS	Q56su6	viburnum mo	362	10	20.4	9	1	OXYT_EISFO	P42998	eisenia foe
290	11	22.4	9	2	Q56SU7_9DIPS	Q56su7	viburnum lo	363	10	20.4	9	1	OXYT_OCTVU	P80027	octopus vul
291	11	22.4	9	2	Q56SU8_9DIPS	Q56su8	viburnum le	364	10	20.4	9	1	UPA7_HUMAN	P30093	homo sapien
292	11	22.4	9	2	Q56SU9_VIBLN	Q56su9	viburnum la	365	10	20.4	9	2	Q16276_HUMAN	Q16276	homo sapien
293	11	22.4	9	2	Q56SV0_VIBLA	Q56sv0	viburnum la	366	10	20.4	9	2	Q6LB30_HUMAN	Q6lb30	homo sapien
294	11	22.4	9	2	Q56SV1_9DIPS	Q56sv1	viburnum ka	367	10	20.4	9	2	Q9UQA3_HUMAN	Q9uqa3	homo sapien
295	11	22.4	9	2	Q56SV2_9DIPS	Q56sv2	viburnum ju	368	10	20.4	9	2	Q53VS2_HUMAN	Q53vs2	homo sapien
296	11	22.4	9	2	Q56SV3_9DIPS	Q56sv3	viburnum ja	369	10	20.4	9	2	Q96T78_HUMAN	Q96t78	homo sapien
297	11	22.4	9	2	Q56SV4_9DIPS	Q56sv4	viburnum ha	370	10	20.4	9	2	P92072_9PULM	P92072	euhadra her
298	11	22.4	9	2	Q56SV5_9DIPS	Q56sv5	viburnum fu	371	10	20.4	9	2	Q5BX00_SCHJA	Q5bx00	schistosoma
299	11	22.4	9	2	Q56SV6_9DIPS	Q56sv6	viburnum fa	372	10	20.4	9	2	Q71GU0_9HYME	Q71gu0	andrena vul
300	11	22.4	9	2	Q56SV7_9DIPS	Q56sv7	viburnum er	373	10	20.4	9	2	Q71H00_9HYME	Q71h00	andrena iso
301	11	22.4	9	2	Q56SV8_9DIPS	Q56sv8	viburnum er	374	10	20.4	9	2	Q7M2R5_RABIT	Q7m2r5	oryctolagus
302	11	22.4	9	2	Q56SV9_9DIPS	Q56sv9	viburnum el	375	10	20.4	9	2	Q9TRU7_BOVIN	Q9tru7	bos taurus
303	11	22.4	9	2	Q56SW0_9DIPS	Q56sw0	viburnum el	376	10	20.4	9	2	P82440_TOBAC	P82440	nicotiana t
304	11	22.4	9	2	Q56SW1_VIBED	Q56sw1	viburnum ed	377	10	20.4	9	2	Q5W1J1_9ROSA	Q5w1j1	crataegus l
305	11	22.4	9	2	Q56SW2_9DIPS	Q56sw2	viburnum di	378	10	20.4	9	2	Q6RVN6_CAPAN	Q6rvn6	capsicum an
306	11	22.4	9	2	Q56SW3_VIBDE	Q56sw3	viburnum de	379	10	20.4	9	2	Q8W7U0_BOSCA	Q8w7u0	bostrychia
307	11	22.4	9	2	Q56SW4_9DIPS	Q56sw4	viburnum dy	380	10	20.4	9	2	Q8W1J5_BOSCA	Q8w1j5	bostrychia
308	11	22.4	9	2	Q56SW5_9DIPS	Q56sw5	viburnum ca	381	10	20.4	9	2	Q9S8J8_ORYSA	Q9s8j8	oryza sativ
309	11	22.4	9	2	Q56SW6_9DIPS	Q56sw6	viburnum co	382	10	20.4	9	2	P72345_PSEXX	P72345	pseudomonas
310	11	22.4	9	2	Q56SW7_9DIPS	Q56sw7	viburnum ci	383	10	20.4	9	2	Q43960_9GAMM	Q43960	azotobacter
311	11	22.4	9	2	Q56SW8_9DIPS	Q56sw8	viburnum ci	384	10	20.4	9	2	Q47410_ECOLI	Q47410	escherichia
312	11	22.4	9	2	Q56SW9_VIBACA	Q56sw9	viburnum ac	385	10	20.4	9	2	Q53914_9ACTO	Q53914	streptomyce
313	11	22.4	9	2	Q56SX0_VIBAC	Q56sx0	viburnum ac	386	10	20.4	9	2	Q7M117_LEUME	Q7m117	leuconostoc
314	11	22.4	9	2	Q56SU0_VIBRA	Q56su0	viburnum ra	387	10	20.4	9	2	Q7M139_9BACT	Q7m139	unidentifie
315	11	22.4	9	2	Q5K2V4_9NOST	Q5k2v4	nodularia h	388	10	20.4	9	2	Q8RKC6_ERWCH	Q8rkc6	erwinia chr
316	11	22.4	9	2	Q5K2V7_NODSP	Q5k2v7	nodularia s	389	10	20.4	9	2	Q9EZ14_SODGL	Q9ez14	sodalis glo
317	11	22.4	9	2	Q9K4M6_STAHA	Q9k4m6	staphylococ	390	10	20.4	9	2	Q51349_PSEAE	Q51349	pseudomonas
318	11	22.4	9	2	O89979_MOUSE	O89979	mus musculu	391	10	20.4	9	2	Q9R735_STRCH	Q9r735	streptomyce
319	11	22.4	9	2	Q811S2_MOUSE	Q811s2	mus musculu	392	10	20.4	9	2	Q91LX8_9GAMA	Q91lx8	retroperico
320	11	22.4	9	2	Q64IX3_FUNHE	Q64ix3	fundulus he	393	10	20.4	9	2	Q9JH81_9GAMA	Q9jh81	retroperico
321	10	20.4	4	2	Q08433_9MURI	Q08433	rattus sp.	394	10	20.4	9	2	Q89491_MUMIV	Q89491	murine minu
322	10	20.4	6	1	E101_LITRU	P82096	litoria rub	395	10	20.4	9	2	Q6XFW2_9PASE	Q6xfw2	nectarinia
323	10	20.4	6	1	SAPP_SEPOF	P83569	sepia offic	396	10	20.4	9	2	Q6XFW1_9PASE	Q6xfw1	nectarinia

397	10	20.4	9	2	Q765Y9_CHICK	Q765Y9_gallus gall	470	9	18.4	8	2	Q7M1C5_ACIFE	Q7m1c5_acidaminoco
398	10	20.4	9	2	QAPU39_9CICH	Qapu39_lepidotamp	471	9	18.4	8	2	Q8G940_BORBU	Q8g940_borrelia bu
399	9	18.4	5	1	BIOB_CITPR	P12997_citrobacter	472	9	18.4	8	2	Q9F5L7_CLOTRI	Q9f5l7_clostridium
400	9	18.4	6	1	PYF1_PENNO	P84005_pneaus mon	473	9	18.4	8	2	Q9S6D5_ECOTLI	Q9s6d5_escherichia
401	9	18.4	6	1	TWOF_SARBU	P41495_sarcophaga	474	9	18.4	8	2	Q62933_RAT	Q62933_rattus norv
402	9	18.4	7	1	E105_LITRU	P82101_litoria rub	475	9	18.4	8	2	Q78DX6_RAT	Q78dx6_rattus norv
403	9	18.4	7	1	HV7_FIG	P01153_sus scrofa	476	9	18.4	8	2	Q9JLD7_MESAU	Q9jld7_mesocricetu
404	9	18.4	7	1	Q98866_SPIOL	O98866_spinacia ol	477	9	18.4	8	2	Q9QVK5_MURI	Q9qvk5_rattus sp.
405	9	18.4	7	2	Q8GL04_BORBU	Q8gl04_borrelia bu	478	9	18.4	8	2	Q3QNV0_MOUSE	Q3qnv0_mus musculu
406	9	18.4	7	2	Q8GL12_BORBU	Q8gl12_borrelia bu	479	9	18.4	8	2	Q3S835_MURI	Q3s835_rattus sp.
407	9	18.4	7	2	P70804_AZOVI	P70804_azotobacter	480	9	18.4	8	2	Q62527_MUSSP	Q62527_mus spretus
408	9	18.4	7	2	Q65578_9ALPH	Q65578_bovine herp	481	9	18.4	8	2	Q80WD5_MUSSP	Q80wd5_mus spretus
409	9	18.4	7	2	Q65713_9INEA	Q65713_influenza a	482	9	18.4	8	2	Q5YDB9_9PERC	Q5ydb9_xiphister m
410	9	18.4	7	2	Q07624_9RETR	Q07624_rous sarcom	483	9	18.4	8	2	Q715L5_VARDU	Q715l5_varanus dum
411	9	18.4	7	2	Q8JE81_9HIVI	Q8je81_human immun	484	9	18.4	8	2	Q94V88_9SAUR	Q94v88_varanus tri
412	9	18.4	8	1	AXHG_GRYBI	P67785_gryllus bim	485	9	18.4	8	2	Q94V91_VARTI	Q94v91_varanus tim
413	9	18.4	8	1	AXH_PROTE	P61856_protophormi	486	9	18.4	8	2	Q94VA0_9SAUR	Q94va0_varanus sem
414	9	18.4	8	1	AXH_ROMMI	P67786_romalea mic	487	9	18.4	8	2	Q94VA7_9SAUR	Q94va7_varanus eal
415	9	18.4	8	1	AXH_TABAT	P14595_tabanus atr	488	9	18.4	8	2	Q94VB2_9SAUR	Q94vb2_varanus eal
416	9	18.4	8	1	ALL12_CARMA	P81815_carcinus ma	489	9	18.4	8	2	Q94VB5_9SAUR	Q94vb5_varanus eal
417	9	18.4	8	1	ALL15_CARMA	P81818_carcinus ma	490	9	18.4	8	2	Q94VB4_VARMML	Q94ve4_varanus mel
418	9	18.4	8	1	ALL4_CYPDO	P81155_cydia pomon	491	9	18.4	8	2	Q94VF3_9SAUR	Q94vf3_varanus kei
419	9	18.4	8	1	ALL8_CARMA	P81811_carcinus ma	492	9	18.4	8	2	Q94VF9_VARIN	Q94vf9_varanus ind
420	9	18.4	8	1	C125_CYPDO	P83661_cyphononyx	493	9	18.4	8	2	Q94VJ4_VARBN	Q94vj4_varanus ben
421	9	18.4	8	1	DY55_LIMSA	P82083_limnodynast	494	9	18.4	8	2	Q76VD6_BLV	Q76vd6_bovine leuk
422	9	18.4	8	1	PAR7_ASCSU	P43171_ascaris suu	495	9	18.4	9	1	CB2B_SFOL	Q9c2l0_spinacia ol
423	9	18.4	8	1	GLOR_HUMAN	P02729_homo sapien	496	9	18.4	9	1	CCAP_CARMA	P84119_carcinus ma
424	9	18.4	8	1	HTF2_BLAOR	P84258_biatta orie	497	9	18.4	9	1	CCAP_SPOER	P84121_spodoptera
425	9	18.4	8	1	HTF2_LEPDE	P84257_leptinotars	498	9	18.4	9	1	CCAP_TENNO	P84120_tenebrio mo
426	9	18.4	8	1	HTF2_PERAM	P84256_periplaneta	499	9	18.4	9	1	CONO_CONGE	P05486_conus geogr
427	9	18.4	8	1	LCK4_LEUMA	P21143_leucophaea	500	9	18.4	9	1	CONO_CONST	P05487_conus stria
428	9	18.4	8	1	LCK6_LEUMA	P19988_leucophaea	501	9	18.4	9	1	NEUI_BALPH	P69056_balaenopter
429	9	18.4	8	1	LPK_LEUMA	P13049_leucophaea	502	9	18.4	9	1	NEUI_HIPAM	P69044_hippopotamu
430	9	18.4	8	1	LPMS_STARP	P23211_staphylococ	503	9	18.4	9	1	NEUI_RABIT	P69043_cryptotolagus
431	9	18.4	8	1	TXV1_PHONI	Q7m3p1_phonotria	504	9	18.4	9	1	NEUI_TACAC	P69057_tachyglossu
432	9	18.4	8	1	UP06_MOUSE	P38644_mus musculu	505	9	18.4	9	1	OXYT_CYPCA	P69128_cyprius ca
433	9	18.4	8	2	Q7LIH2_YEAST	P71ih2_saccharomyc	506	9	18.4	9	1	OXYT_HYDCA	P69058_hydrolagus
434	9	18.4	8	2	Q15889_HUMAN	Q15889_homo sapien	507	9	18.4	9	1	OXYT_PETMA	P69129_petryonzo
435	9	18.4	8	2	Q3S3T6_HUMAN	Q53st6_homo sapien	508	9	18.4	9	1	PKK1_PERAM	P82691_periplaneta
436	9	18.4	8	2	Q3BR65_SCHJA	Q5br65_schistosoma	509	9	18.4	9	1	PFY4_PENNO	P84008_pneaus mon
437	9	18.4	8	2	Q6VYE3_9NEOP	Q6vye3_heliconius	510	9	18.4	9	1	PYF_LOLVU	P84004_loligo vulg
438	9	18.4	8	2	Q70MX3_TRYBR	Q70mx3_trypanosoma	511	9	18.4	9	1	RT33_BOVIN	P82926_bos taurus
439	9	18.4	8	2	Q7M3N2_MANSE	Q7m3n2_manduca sex	512	9	18.4	9	1	XVLA_STRS8	P19149_streptomyce
440	9	18.4	8	2	Q8GCD7_9EUCA	Q8gcd7_lomis hirta	513	9	18.4	9	2	Q7S3Z9_NEUCR	Q7s3z9_neurospora
441	9	18.4	8	2	Q4X617_PLACH	Q4x617_plasmodium	514	9	18.4	9	2	Q15891_HUMAN	Q15891_homo sapien
442	9	18.4	8	2	Q4XT27_PLACH	Q4xt27_plasmodium	515	9	18.4	9	2	Q15896_HUMAN	Q15896_homo sapien
443	9	18.4	8	2	Q95213_RABIT	Q95213_cryptotolagus	516	9	18.4	9	2	Q8IUU5_HUMAN	Q8iuu5_homo sapien
444	9	18.4	8	2	Q89YK1_9CETA	Q89y3_sus sp. ins	517	9	18.4	9	2	Q9H326_HUMAN	Q9h326_homo sapien
445	9	18.4	8	2	Q8H9K1_9CAUD	Q8h9k1_bacterioph	518	9	18.4	9	2	Q9UC36_HUMAN	Q9uc36_homo sapien
446	9	18.4	8	2	Q8SBJ0_BPR69	Q8sbj0_bacterioph	519	9	18.4	9	2	Q9UKJ6_HUMAN	Q9ukj6_homo sapien
447	9	18.4	8	2	O19956_GOSAR	O19956_gossypium a	520	9	18.4	9	2	Q9UMA0_HUMAN	Q9uma0_homo sapien
448	9	18.4	8	2	O19958_GOSBA	O19958_gossypium b	521	9	18.4	9	2	Q9UQW0_HUMAN	Q9uqw0_homo sapien
449	9	18.4	8	2	O19959_GOSTO	O19959_gossypium t	522	9	18.4	9	2	Q5C1F8_SCHJA	Q5c1f8_schistosoma
450	9	18.4	8	2	O19960_GOSMU	O19960_gossypium m	523	9	18.4	9	2	P84502_9ANNE	P84502_annelida. l
451	9	18.4	8	2	O19961_GOSDA	O19961_gossypium d	524	9	18.4	9	2	Q7RR12_PLAYO	Q7rr12_plasmodium
452	9	18.4	8	2	Q40659_ORYSA	Q40659_oryza sativ	525	9	18.4	9	2	Q8WGB6_PROCL	Q8wge6_procambarus
453	9	18.4	8	2	Q5D4X1_9MYRT	Q5d4x1_physocalymm	526	9	18.4	9	2	Q4YEF1_PLABE	Q4yef1_plasmodium
454	9	18.4	8	2	Q5D4X2_9MYRT	Q5d4x2_pehria comp	527	9	18.4	9	2	Q4YIG1_PLABE	Q4yig1_plasmodium
455	9	18.4	8	2	Q5D4X4_9MYRT	Q5d4x4_koehneria m	528	9	18.4	9	2	Q28093_BOVIN	Q28093_bos taurus
456	9	18.4	8	2	Q659Q3_9CARY	Q659q3_silene oste	529	9	18.4	9	2	Q6LAP5_WACEU	Q6lap5_macropus eu
457	9	18.4	8	2	Q659Q5_9CARY	Q659q5_silene invo	530	9	18.4	9	2	Q9XJN0_9VIRU	Q9xjn0_bacterioph
458	9	18.4	8	2	Q70Y57_9LAMI	Q70y57_fuerstia af	531	9	18.4	9	2	Q58U35_PESSE	Q58u35_feautucopsite
459	9	18.4	8	2	Q7XB03_MAIZE	Q7xb03_zea mays (m	532	9	18.4	9	2	Q58U41_9FOAL	Q58u41_haynaldia v
460	9	18.4	8	2	Q9GD00_9JILI	Q9gd00_masoala mad	533	9	18.4	9	2	Q5D4X3_9MYRT	Q5d4x3_lourtella r
461	9	18.4	8	2	Q9SAY7_9TILI	Q9say7_dioscorea t	534	9	18.4	9	2	Q70Y63_CONTO	Q70y63_congea tome
462	9	18.4	8	2	Q4JLA6_BETVU	Q4jla6_beta vulgar	535	9	18.4	9	2	Q70F03_9FLOR	Q70fu3_plocamium t
463	9	18.4	8	2	Q68485_KLEPN	Q68485_klebsiella	536	9	18.4	9	2	Q76FU9_9FLOP	Q76fu9_plocamium r
464	9	18.4	8	2	P72221_PRESP	P72221_pseudomonas	537	9	18.4	9	2	Q7X8P7_MAIZE	Q7x8p7_zea mays (m
465	9	18.4	8	2	P77556_ECOLI	P77556_escherichia	538	9	18.4	9	2	Q30790_ERWAM	Q30790_erwinia amy
466	9	18.4	8	2	Q56140_STRTR	Q56140_streptococc	539	9	18.4	9	2	Q43928_AGRPU	Q43928_aeromonas p
467	9	18.4	8	2	P83152_ANASL	P83152_anabaena sp	540	9	18.4	9	2	Q44001_9GAMM	Q44001_aeromonas e
468	9	18.4	8	2	Q6LDP8_PSEAE	Q6ldp8_pseudomonas	541	9	18.4	9	2	Q44377_AERTR	Q44377_aeromonas t
469	9	18.4	8	2	Q7DKL7_STAUA	Q7dkl7_staphylococ	542	9	18.4	9	2	Q44468_9GAMM	Q44468_aeromonas v

543	9	18.4	9	2	Q57328	AEROS	Q57328	aeromonas s	616	8	16.3	8	2	Q9UDZ4	HUMAN	Q9UDZ4	homo sapien
544	9	18.4	9	2	Q61AR8	AERHY	Q61AR8	aeromonas h	617	8	16.3	8	2	Q9UMH9	HUMAN	Q9UMH9	homo sapien
545	9	18.4	9	2	Q8G1Z6	LACDL	Q8G1Z6	lactobacill	618	8	16.3	8	2	Q34909	LOCOMI	Q34909	locusta mig
546	9	18.4	9	2	Q8GLZ6	BORBU	Q8GLZ6	borrelia bu	619	8	16.3	8	2	Q9UB13	9PULM	Q9UB13	albinaria h
547	9	18.4	9	2	Q8KUJ3	BORBU	Q8KUJ3	borrelia bu	620	8	16.3	8	2	Q4XU8	PLACH	Q4XU8	plasmodium
548	9	18.4	9	2	Q9JN16	STRPY	Q9JN16	streptococc	621	8	16.3	8	2	Q02831	RABIT	Q02831	oryctolagus
549	9	18.4	9	2	Q9R635	CHLTR	Q9R635	chlamydia t	622	8	16.3	8	2	Q9BF82	URSAR	Q9BF82	ursus arcto
550	9	18.4	9	2	Q9R9CA	BORBU	Q9R9CA	borrelia bu	623	8	16.3	8	2	Q9BF83	CANFA	Q9BF83	canis famli
551	9	18.4	9	2	Q84F20	BACSU	Q84F20	bacillus su	624	8	16.3	8	2	Q9BF84	PANON	Q9BF84	panthera on
552	9	18.4	9	2	Q47556	ECOLI	Q47556	escherichia	625	8	16.3	8	2	Q9BF85	LEOPA	Q9BF85	leopardus p
553	9	18.4	9	2	Q31363	BORGA	Q31363	borrelia ga	626	8	16.3	8	2	Q9BF86	FELCA	Q9BF86	felis silve
554	9	18.4	9	2	Q924N8	MOUSE	Q924N8	mus musculu	627	8	16.3	8	2	Q9BF87	TAPIN	Q9BF87	tapius ind
555	9	18.4	9	2	Q61723	MOUSE	Q61723	mus musculu	628	8	16.3	8	2	Q9BF88	HORSE	Q9BF88	equus cabal
556	9	18.4	9	2	Q71069	9PARA	Q71069	canine dist	629	8	16.3	8	2	Q9BF89	OKAJU	Q9BF89	okapia john
557	9	18.4	9	2	Q69473	HVNI	Q69473	human herpe	630	8	16.3	8	2	Q9BF90	TRAEU	Q9BF90	tragelaphus
558	9	18.4	9	2	Q82622	9COCO	Q82622	avian infec	631	8	16.3	8	2	Q9BF91	HIPAM	Q9BF91	hipopotamu
559	9	18.4	9	2	Q31415	CHICK	Q31415	gallus gall	632	8	16.3	8	2	Q9BF94	NYCTH	Q9BF94	nycteris th
560	9	18.4	9	2	Q6HA69	TRITG	Q6HA69	trimeresuru	633	8	16.3	8	2	Q9BF95	ROULA	Q9BF95	rousettus l
561	9	18.4	9	2	Q6HA76	9SAUR	Q6HA76	trimeresuru	634	8	16.3	8	2	Q9BF96	PTEGI	Q9BF96	pteropus gi
562	9	18.4	9	2	Q71DX2	9SAUR	Q71DX2	urostrophus	635	8	16.3	8	2	Q9BF97	ARTJA	Q9BF97	artibeus ja
563	9	18.4	9	2	Q71Z81	RANPI	Q71Z81	rana pipien	636	8	16.3	8	2	Q9BF98	CALGO	Q9BF98	callimico g
564	9	18.4	9	2	Q8SHF0	CHANA	Q8SHF0	chamaeleo n	637	8	16.3	8	2	Q9BFA1	ATEFU	Q9BFA1	ateles fusc
565	9	18.4	9	2	Q94VC6	9SAUR	Q94VC6	varanus pil	638	8	16.3	8	2	Q9BFA2	TARBA	Q9BFA2	tarsius ban
566	9	18.4	9	2	Q94VJ1	VARDO	Q94VJ1	varanus dor	639	8	16.3	8	2	Q9BFA3	LEMCA	Q9BFA3	lemur catia
567	9	18.4	9	2	Q9PS68	CHICK	Q9PS68	gallus gall	640	8	16.3	8	2	Q9BFA4	TUPMI	Q9BFA4	tupaia mino
568	9	18.4	9	2	Q9T688	GECGE	Q9T688	gecko gecko	641	8	16.3	8	2	Q9BFA5	CYNVA	Q9BFA5	cynocephalu
569	9	18.4	9	2	Q53EB6	9NEOB	Q53EB6	eleutheroda	642	8	16.3	8	2	Q9BFA6	ORVAF	Q9BFA6	orycterus
570	9	18.4	9	2	Q4TU46	9AVES	Q4TU46	anser anser	643	8	16.3	8	2	Q9BFA8	LOXAF	Q9BFA8	loxodonta a
571	9	18.4	9	2	Q8AEW8	9HIV1	Q8AEW8	human immun	644	8	16.3	8	2	Q9BFA9	PROCA	Q9BFA9	prociavia ca
572	8	16.3	8	16.3	3 1 GRWM	HUMAN	P01157	homo sapien	645	8	16.3	8	2	Q9BFB0	TRIMA	Q9BFB0	trichechus
573	8	16.3	3	1	THYL	BOMOR	P62970	homo sapien	646	8	16.3	8	2	Q9BFB1	ECHE	Q9BFB1	echinops te
574	8	16.3	3	1	THYL	NOTVI	P62971	notophthal	647	8	16.3	8	2	Q9BFB2	SORAR	Q9BFB2	sorex arane
575	8	16.3	3	1	THYL	PIG	P62968	ovis aries	648	8	16.3	8	2	Q9BFB3	CONCR	Q9BFB3	condylura c
576	8	16.3	3	1	THYL	SHEEP	P62969	ovis aries	649	8	16.3	8	2	Q9BFB4	TALAL	Q9BFB4	talpa alta
577	8	16.3	4	1	THYL	PSECH	P19316	pseudomonas	650	8	16.3	8	2	Q9BFB5	ERICO	Q9BFB5	erinaceus c
578	8	16.3	5	1	FARP	CHICK	P83308	gallus gall	651	8	16.3	8	2	Q9BFB6	MYRTR	Q9BFB6	myrmecophag
579	8	16.3	5	1	TPIS	CANFA	P54714	canis famli	652	8	16.3	8	2	Q9BFB7	TAMTE	Q9BFB7	tamandua te
580	8	16.3	5	2	Q99007	HORVU	Q99007	ordeum vul	653	8	16.3	8	2	Q9BFB8	CHAVI	Q9BFB8	chaetophrac
581	8	16.3	6	1	ASP2	LACSN	P82655	lactobacill	654	8	16.3	8	2	Q9BFB9	EUPSX	Q9BFB9	euphractur
582	8	16.3	6	1	CIP1	MYTBD	P13736	mytilus edu	655	8	16.3	8	2	Q9BFC0	CHODI	Q9BFC0	choloepus d
583	8	16.3	7	1	FAP2	ASCUS	P67879	ascaris suu	656	8	16.3	8	2	Q9BFC1	CHOCO	Q9BFC1	choloepus h
584	8	16.3	7	1	FAP2	PANRE	P67880	panagrellus	657	8	16.3	8	2	Q9BFC2	MACCU	Q9BFC2	macroepus eu
585	8	16.3	7	1	LANC	CARUI	P36960	carnobacter	658	8	16.3	8	2	Q9BFC3	DIDMA	Q9BFC3	didelphis m
586	8	16.3	7	1	MNPI	LEPDE	P42984	leptinotars	659	8	16.3	8	2	Q9XSV1	CANFA	Q9XSV1	canis famli
587	8	16.3	7	1	UF03	MOUSE	P38641	mus musculu	660	8	16.3	8	2	Q6SKV2	9NARC	Q6SKV2	trichocollea
588	8	16.3	7	2	Q8TAQ4	HUMAN	Q8TAQ4	homo sapien	661	8	16.3	8	2	Q76414	CYCPCA	Q76414	cycas panch
589	8	16.3	7	2	P92233	LYCES	P92233	lycopersico	662	8	16.3	8	2	Q76415	9SPER	Q76415	cycas taicu
590	8	16.3	7	2	P82445	TOBAC	P82445	nicotiana t	663	8	16.3	8	2	Q7M1F1	RAPSA	Q7M1F1	raphanus sa
591	8	16.3	7	2	Q8K3H6	RAT	Q8K3H6	rattus norv	664	8	16.3	8	2	Q8GTG5	LYCES	Q8GTG5	lycopersico
592	8	16.3	7	2	Q42564	FUGRU	Q42564	fugu rubrip	665	8	16.3	8	2	Q9GC24	9LILI	Q9GC24	nenga pumil
593	8	16.3	7	2	Q99182	9SMEG	Q99182	gnatholebia	666	8	16.3	8	2	Q9GD47	9LILI	Q9GD47	hydrastelle
594	8	16.3	8	1	AXH	GRST	P84241	geotrupes s	667	8	16.3	8	2	Q9STD5	9ROSI	Q9STD5	begonia pal
595	8	16.3	8	1	AXH	MELML	P84240	melolontha	668	8	16.3	8	2	Q9T2Y1	9ROSI	Q9T2Y1	begonia apt
596	8	16.3	8	1	AXH	PACMA	P84242	pachnoda ma	669	8	16.3	8	2	Q9T2Y2	9ROSI	Q9T2Y2	begonia tai
597	8	16.3	8	1	COX6	RAT	P80430	rattus norv	670	8	16.3	8	2	Q9T2Y3	9ROSI	Q9T2Y3	begonia for
598	8	16.3	8	1	HTF1	BLAOR	P84261	blatta orie	671	8	16.3	8	2	Q9TMN4	9ROSI	Q9TMN4	begonia for
599	8	16.3	8	1	HTF1	LEPDE	P84260	leptinotars	672	8	16.3	8	2	Q9XGL8	9ROSI	Q9XGL8	begonia chi
600	8	16.3	8	1	HTF1	PERAM	P84259	periplaneta	673	8	16.3	8	2	Q9XGL9	9ROSI	Q9XGL9	begonia nan
601	8	16.3	8	1	HTP	TENMO	P67789	tenebrio mo	674	8	16.3	8	2	Q79CX6	MYXXA	Q79CX6	myxococcus
602	8	16.3	8	1	HTF	ZOPRU	P67790	zophobas ru	675	8	16.3	8	2	Q7BW19	VIBCH	Q7BW19	vibrio chol
603	8	16.3	8	1	RPCH	PANBO	P08939	pandalus bo	676	8	16.3	8	2	Q7M194	ECOLI	Q7M194	escherichia
604	8	16.3	8	1	UH09	RAT	P56575	rattus norv	677	8	16.3	8	2	Q8KPX4	9CHRO	Q8KPX4	microcystis
605	8	16.3	8	2	Q35752	YEAST	P56575	rattus norv	678	8	16.3	8	2	Q8RJ10	STRCS	Q8RJ10	streptomyces
606	8	16.3	8	2	Q15893	HUMAN	Q15893	homo sapien	679	8	16.3	8	2	Q9AGP4	9NICC	Q9AGP4	arthrobacte
607	8	16.3	8	2	Q15900	HUMAN	Q15900	homo sapien	680	8	16.3	8	2	Q9X3K1	9PROC	Q9X3K1	prochloroco
608	8	16.3	8	2	Q95A66	HUMAN	Q95A66	homo sapien	681	8	16.3	8	2	Q60615	MOUSE	Q60615	mus musculu
609	8	16.3	8	2	Q5ZEY7	HUMAN	Q5ZEY7	homo sapien	682	8	16.3	8	2	Q7M039	RAT	Q7M039	rattus norv
610	8	16.3	8	2	Q9UMC7	HUMAN	Q9UMC7	homo sapien	683	8	16.3	8	2	Q7M056	9MURI	Q7M056	mus sp. gen
611	8	16.3	8	2	Q9Y4J4	HUMAN	Q9Y4J4	homo sapien	684	8	16.3	8	2	Q80WD6	MOUSE	Q80WD6	mus musculu
612	8	16.3	8	2	Q9Y4X6	HUMAN	Q9Y4X6	homo sapien	685	8	16.3	8	2	Q99NS0	AGOTA	Q99NS0	agouti tazc
613	8	16.3	8	2	Q6LDS6	HUMAN	Q6LDS6	homo sapien	686	8	16.3	8	2	Q99NS1	9HYST	Q99NS1	dinomyia bra
614	8	16.3	8	2	Q53SB0	HUMAN	Q53SB0	homo sapien	687	8	16.3	8	2	Q99NS2	MYOCO	Q99NS2	myocaator c
615	8	16.3	8	2	Q548H6	HUMAN	Q548H6	homo sapien	688	8	16.3	8	2	Q99NS3	HYDHY	Q99NS3	hydrochoeru

689	8	16.3	8	2	Q9NS4_9HYST	Q9ns4	cavia tschu	762	8	16.3	9	2	Q95DS6_9MAGN	Q95ds6	magnolia wi
690	8	16.3	8	2	Q9NS5_DIPHE	Q9ns5	dipodomys h	763	8	16.3	9	2	Q95DS7_9MAGN	Q95ds7	magnolia si
691	8	16.3	8	2	Q9NS6_EREDO	Q9ns6	erethizon d	764	8	16.3	9	2	Q95DT3_9MAGN	Q95dt3	magnolia fl
692	8	16.3	8	2	Q9NS7_CRIGR	Q9ns7	cricetus	765	8	16.3	9	2	Q9GCV6_9LILI	Q9gcv6	scleroseper
693	8	16.3	8	2	Q9NS8_RAT	Q9ns8	rattus norv	766	8	16.3	9	2	Q9GDI2_9LILI	Q9gdi2	linospadix
694	8	16.3	8	2	Q9NS9_MOUSE	Q9ns9	mus musculus	767	8	16.3	9	2	Q9T3P3_MAGVI	Q9t3p3	magnolia vi
695	8	16.3	8	2	Q9NT0_PEDCA	Q9nt0	pedetes cap	768	8	16.3	9	2	Q9T3P4_MAGMA	Q9t3p4	magnolia ma
696	8	16.3	8	2	Q9NT1_CASCN	Q9nt1	caesor cana	769	8	16.3	9	2	Q9THL5_9MAGN	Q9thl5	magnolia li
697	8	16.3	8	2	Q9NT2_TAMST	Q9nt2	tamias stri	770	8	16.3	9	2	Q9THL6_9MAGN	Q9thl6	magnolia si
698	8	16.3	8	2	Q6LD23_MOUSE	Q6ld23	mus musculus	771	8	16.3	9	2	Q9THL7_9MAGN	Q9thl7	magnolia of
699	8	16.3	8	2	Q9WJ33_9ALPH	Q9wj33	suid herpes	772	8	16.3	9	2	Q9THL8_9MAGN	Q9thl8	magnolia of
700	8	16.3	8	2	Q8QGN4_MEHV1	Q8qgn4	meleagrid h	773	8	16.3	9	2	Q9THL9_MAGPY	Q9thl9	magnolia py
701	8	16.3	8	2	P79940_XENLA	P79940	xenopus lae	774	8	16.3	9	2	Q9THM0_9MAGN	Q9thm0	magnolia fr
702	8	16.3	8	2	Q94V82_9SAUR	Q94v82	varanus yow	775	8	16.3	9	2	Q9TND7_LIRTU	Q9tnd7	liriodendro
703	8	16.3	8	1	DNF1_LOCMI	P16339	locusta mig	776	8	16.3	9	2	Q9TND8_LIRCH	Q9tnd8	liriodendro
704	8	16.3	9	1	FAR3_CALVO	P18558	calliphora	777	8	16.3	9	2	Q9TND9_MICFI	Q9tnd9	michelia fi
705	8	16.3	8	1	FAR5_ASCSU	P43170	ascaris suu	778	8	16.3	9	2	Q9TNE0_9MAGN	Q9tne0	michelia co
706	8	16.3	8	1	FAR9_ASCSU	P43172	ascaris suu	779	8	16.3	9	2	Q9TNE1_MAGLI	Q9tne1	magnolia li
707	8	16.3	8	1	FARP_CALSI	P38495	callinectes	780	8	16.3	9	2	Q9TNE2_MAGAC	Q9tne2	magnolia ac
708	8	16.3	8	1	FIBB_PAPHA	P13343	papio hamad	781	8	16.3	9	2	Q9TNE3_MAGST	Q9tne3	magnolia st
709	8	16.3	8	1	LITO_LITAU	P08945	litoria aur	782	8	16.3	9	2	Q9TNE4_MAGSL	Q9tne4	magnolia sa
710	8	16.3	8	1	LITR_PHYRO	P08946	phylomedus	783	8	16.3	9	2	Q9TNE5_9MAGN	Q9tne5	magnolia ko
711	8	16.3	8	1	MOSH_CLYJA	P19852	chylpeaster	784	8	16.3	9	2	Q9TNE6_9MAGN	Q9tne6	magnolia de
712	8	16.3	8	1	NSK1_SARBU	P41492	sarcophaga	785	8	16.3	9	2	Q9TNE7_9MAGN	Q9tne7	magnolia ni
713	8	16.3	8	1	ULAD_HUMAN	P31929	homo sapien	786	8	16.3	9	2	Q9TNE8_9MAGN	Q9tne8	magnolia de
714	8	16.3	8	1	UPA3_HUMAN	P30089	homo sapien	787	8	16.3	9	2	Q9TNE9_9MAGN	Q9tne9	magnolia co
715	8	16.3	8	2	Q5ILX3_MAGGR	Q5ilx3	magnaportha	788	8	16.3	9	2	Q9TNF0_MAGTR	Q9tnf0	magnolia tr
716	8	16.3	8	2	Q14277_HUMAN	Q14277	homo sapien	789	8	16.3	9	2	Q9TNF1_9MAGN	Q9tnf1	magnolia he
717	8	16.3	8	2	Q16220_HUMAN	Q16220	homo sapien	790	8	16.3	9	2	Q9TNF2_9MAGN	Q9tnf2	magnolia ta
718	8	16.3	8	2	Q6LEH2_HUMAN	Q6leh2	homo sapien	791	8	16.3	9	2	Q9TNF3_9MAGN	Q9tnf3	magnolia sh
719	8	16.3	8	2	Q6LEK1_HUMAN	Q6lek1	homo sapien	792	8	16.3	9	2	Q9TNF4_9MAGN	Q9tnf4	magnolia sc
720	8	16.3	8	2	Q99887_HUMAN	Q99887	homo sapien	793	8	16.3	9	2	Q9TNF5_9MAGN	Q9tnf5	magnolia gu
721	8	16.3	8	2	Q9NYH5_HUMAN	Q9nyh5	homo sapien	794	8	16.3	9	2	Q9TNF6_MAGGA	Q9tnf6	magnolia gr
722	8	16.3	8	2	Q7M3N6_GRYBI	Q7m3n6	gyrillus bim	795	8	16.3	9	2	Q4U0F2_MALDO	Q4u0f2	malus domes
723	8	16.3	8	2	Q7RHC2_PLAYO	Q7rch2	plasmodium	796	8	16.3	9	2	Q45533_BACSU	Q45533	bacillus su
724	8	16.3	8	2	Q7RSP2_PLAYO	Q7rsp2	plasmodium	797	8	16.3	9	2	P83157_ANASL	P83157	anabaena sp
725	8	16.3	8	2	Q8W8X4_9SCHN	Q8w8x4	diadema mex	798	8	16.3	9	2	Q6LDL7_STAAL	Q6ldl7	staphylococ
726	8	16.3	8	2	Q4Y590_PLACH	Q4y590	plasmodium	799	8	16.3	9	2	Q712A6_SINSB	Q712a6	sinorhizobi
727	8	16.3	8	2	Q8HZY2_CANFA	Q8hzy2	canis famil	800	8	16.3	9	2	Q56380_9CYAN	Q56380	uncultured
728	8	16.3	8	2	Q8MJN1_CEPY	Q8mjn1	cebuella py	801	8	16.3	9	2	Q35953_MOUSE	Q35953	mus musculus
729	8	16.3	8	2	Q8MJN2_CALJA	Q8mjn2	callithrix	802	8	16.3	9	2	Q7M078_RAT	Q7m078	rattus norv
730	8	16.3	8	2	Q8MJN3_CALGO	Q8mjn3	callimico g	803	8	16.3	9	2	Q8R514_RAT	Q8r514	rattus norv
731	8	16.3	8	2	Q8MJN4_LEORO	Q8mjn4	leontopithe	804	8	16.3	9	2	Q9MG3_MOUSE	Q9mg3	mus musculus
732	8	16.3	8	2	Q8MJN5_SAGFU	Q8mjn5	seguinus fu	805	8	16.3	9	2	Q9QWTO_MOUSE	Q9qwt0	mus musculus
733	8	16.3	8	2	Q8MJN6_AOTAZ	Q8mjn6	aotus azara	806	8	16.3	9	2	Q62530_MUSSP	Q62530	mus apretus
734	8	16.3	8	2	Q8MJN7_SAISS	Q8mjn7	saimiri sci	807	8	16.3	9	2	Q71067_CANIE	Q71067	canine diet
735	8	16.3	8	2	Q8MJN8_CEBAP	Q8mjn8	cebus apell	808	8	16.3	9	2	Q71068_CANIE	Q71068	canine diet
736	8	16.3	8	2	Q8MJN9_ATEFU	Q8mjn9	ateles fusc	809	8	16.3	9	2	Q83622_9FLAV	Q83622	murray vall
737	8	16.3	8	2	Q9PT77_BOVIN	Q9pt77	bos taurus	810	8	16.3	9	2	Q83622_9FLAV	Q83622	murray vall
738	8	16.3	8	2	Q9XSL0_CAPHI	Q9xsl0	capra hircu	811	8	16.3	9	2	Q7LZ66_MELGA	Q7lzt6	meleagris g
739	8	16.3	8	2	Q6JDL5_CANFA	Q6jdl5	canis famil	812	8	16.3	9	2	Q7LZ75_RANES	Q7lzt5	rana seculi
740	8	16.3	8	2	Q6LAP2_SMIMA	Q6lap2	sminthopsis	813	8	16.3	9	2	Q94V10_VARGI	Q94v10	varanus g9g
741	8	16.3	8	2	Q5D4Y6_9MYRT	Q5d4y6	capuronina m	814	7	14.3	4	1	FLRN_ATEL	Q16047	homo sapien
742	8	16.3	8	2	Q5EFY1_9BRYO	Q5efy1	polytrichum	815	7	14.3	5	1	PAP2_PARMA	P81864	pardachirus
743	8	16.3	8	2	Q5VH65_9ASPA	Q5vh65	hymenocalli	816	7	14.3	5	1	PRCT_CARMA	P67857	carcinus ma
744	8	16.3	8	2	Q5VH71_9ASPA	Q5vh71	chlidanthus	817	7	14.3	5	1	PRCT_CARMA	P67858	limulus pol
745	8	16.3	8	2	Q6EX64_9LAMI	Q6ex64	hyptis flor	818	7	14.3	5	1	PRCT_LIMPO	P67859	periphaneca
746	8	16.3	8	2	Q6PT73_9ORYZ	Q6pt73	zizania aqu	819	7	14.3	6	1	PRCT_PERAM	P42985	leptinotars
747	8	16.3	8	2	Q6PT74_9FOAL	Q6pt74	streptocha	820	7	14.3	6	1	OVN_LEPDE	P67859	periphaneca
748	8	16.3	8	2	Q6PT75_SORBI	Q6pt75	sorghum bic	821	7	14.3	7	1	ALL3_CARMA	P81806	carcinus ma
749	8	16.3	8	2	Q6PT76_LOLPR	Q6pt76	lolium pere	822	7	14.3	7	1	ALL4_CARMA	P81807	carcinus ma
750	8	16.3	8	2	Q6PT77_DANSP	Q6pt77	danthonia s	823	7	14.3	7	1	ALL5_CARMA	P81808	carcinus ma
751	8	16.3	8	2	Q6PT78_9FOAL	Q6pt78	chasanmanthi	824	7	14.3	7	1	DEM_PHYHY	P84523	phylomedus
752	8	16.3	8	2	Q6PT79_9FOAL	Q6pt79	bouteloua g	825	7	14.3	7	1	FAR1_HELTI	P41875	helisoma tr
753	8	16.3	8	2	Q7X6A3_MAIZE	Q7x6a3	zea mays (m	826	7	14.3	7	1	FAR4_PANRE	P41875	panagrellus
754	8	16.3	8	2	Q8MEM3_9ROSI	Q8mem3	howittia tr	827	7	14.3	7	1	FARB_CALVO	P41866	calliphora
755	8	16.3	8	2	Q95DR8_9MAGN	Q95dr8	michelia ma	828	7	14.3	7	1	UN06_PINPS	P81675	pinus pinas
756	8	16.3	8	2	Q95DR9_9MAGN	Q95dr9	manglietia	829	7	14.3	7	2	Q8NH77_HUMAN	Q8nh77	homo sapien
757	8	16.3	8	2	Q95DS0_9MAGN	Q95ds0	manglietia	830	7	14.3	7	2	Q66113_9COMO	Q66113	cherry leaf
758	8	16.3	8	2	Q95DS1_9MAGN	Q95ds1	manglietia	831	7	14.3	7	2	Q8UJ20_CHICK	Q8jj20	gallus gall
759	8	16.3	8	2	Q95DS2_9MAGN	Q95ds2	magnolia ov	832	7	14.3	8	1	AKH_LIBAU	P25418	libellula a
760	8	16.3	8	2	Q95DS4_9MAGN	Q95ds4	magnolia do	833	7	14.3	8	1	ALL16_CARMA	P81819	carcinus ma
761	8	16.3	8	2	Q95DS5_9MAGN	Q95ds5	magnolia sa	834	7	14.3	8	1	ALL16_CYPDO	P82154	cydia pomon

835	7	14.3	8	1	ALL4_CALVO	P41840 calliphora	908	7	14.3	9	1	CX6A1_THUOB	P80975 thunnus obe
836	7	14.3	8	1	ALL9_CARMA	P81812 carinus ma	909	7	14.3	9	1	FAR1_CALVO	P41856 calliphora
837	7	14.3	8	1	COM2_CONFU	P58785 conus purpu	910	7	14.3	9	1	FAR2_CALVO	P41857 calliphora
838	7	14.3	8	1	FAR1_PANRE	P41872 panagrellus	911	7	14.3	9	1	FAR4_CALVO	P41859 calliphora
839	7	14.3	8	1	LCK2_LEUMA	P21141 leucophaea	912	7	14.3	9	1	FAR4_PENNO	P83319 penaeus mon
840	7	14.3	8	1	LCK7_LEUMA	P19989 leucophaea	913	7	14.3	9	1	FAR5_PANRE	P82661 panagrellus
841	7	14.3	8	1	LMT2_LOCMI	P22396 locusta mig	914	7	14.3	9	1	FAR5_PENNO	P83320 penaeus mon
842	7	14.3	8	1	NPMB_BOVIN	P15507 bos taurus	915	7	14.3	9	1	FARA_CALVO	P41865 calliphora
843	7	14.3	8	1	PPK3_PERAM	P82618 periplaneta	916	7	14.3	9	1	FNRF1_SARBU	P83350 sarcophaga
844	7	14.3	8	1	UPA10_HUMAN	P30096 homo sapien	917	7	14.3	9	1	LMT3_LOCMI	P41489 locusta mig
845	7	14.3	8	2	Q7M4U4_ASPFI	Q7M4U4 aspergillus	918	7	14.3	9	1	NEUU_CAVPO	P34966 cavia porce
846	7	14.3	8	2	Q15888_HUMAN	Q15888 homo sapien	919	7	14.3	9	1	PVK2_SARBU	P84353 sarcophaga
847	7	14.3	8	2	Q15901_HUMAN	Q15901 homo sapien	920	7	14.3	9	1	PFY2_PENNO	P84006 penaeus mon
848	7	14.3	8	2	Q6BC29_HUMAN	Q6BC29 homo sapien	921	7	14.3	9	1	PFY3_PENNO	P84007 penaeus mon
849	7	14.3	8	2	Q6LC12_HUMAN	Q6LC12 homo sapien	922	7	14.3	9	1	RS10_SERNA	P86936 serratia ma
850	7	14.3	8	2	Q71UR9_HUMAN	Q71UR9 homo sapien	923	7	14.3	9	1	SAMP_MUSCA	P19095 mustelus ca
851	7	14.3	8	2	Q7KYV5_HUMAN	Q7KYV5 homo sapien	924	7	14.3	9	1	SAP_SNOVA	P24047 stomopneute
852	7	14.3	8	2	Q7Z7I9_HUMAN	Q7Z7I9 homo sapien	925	7	14.3	9	1	TKLI_LOCMI	P16223 locusta mig
853	7	14.3	8	2	Q81UB8_HUMAN	Q81UB8 homo sapien	926	7	14.3	9	1	UPA6_HUMAN	P30092 homo sapien
854	7	14.3	8	2	Q81VK3_HUMAN	Q81VK3 homo sapien	927	7	14.3	9	2	Q16386_HUMAN	P16386 homo sapien
855	7	14.3	8	2	Q9P0K3_HUMAN	Q9P0K3 homo sapien	928	7	14.3	9	2	Q5QEX9_HUMAN	Q5QEX9 homo sapien
856	7	14.3	8	2	Q9UJ50_HUMAN	Q9UJ50 homo sapien	929	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
857	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	930	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
858	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	931	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
859	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	932	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
860	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	933	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
861	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	934	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
862	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	935	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
863	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	936	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
864	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	937	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
865	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	938	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
866	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	939	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
867	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	940	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
868	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	941	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
869	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	942	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
870	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	943	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
871	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	944	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
872	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	945	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
873	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	946	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
874	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	947	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
875	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	948	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
876	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	949	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
877	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	950	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
878	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	951	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
879	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	952	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
880	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	953	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
881	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	954	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
882	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	955	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
883	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	956	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
884	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	957	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
885	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	958	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
886	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	959	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
887	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	960	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
888	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	961	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
889	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	962	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
890	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	963	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
891	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	964	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
892	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	965	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
893	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	966	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
894	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	967	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
895	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	968	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
896	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	969	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
897	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	970	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
898	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	971	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
899	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	972	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
900	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	973	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
901	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	974	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
902	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	975	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
903	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	976	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
904	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	977	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
905	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	978	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
906	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	979	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien
907	7	14.3	8	2	Q8Y4J3_HUMAN	Q8Y4J3 homo sapien	980	7	14.3	9	2	Q67A08_HUMAN	Q67A08 homo sapien

981 7 14.3 9 2 Q80X07 9MURI Q80X07 mus sp. chr
 982 7 14.3 9 2 Q80Y66 MOUSE Q80Y66 mus musculus
 983 7 14.3 9 2 Q8CG13 MOUSE Q8CG13 mus musculus
 984 7 14.3 9 2 Q4W8Q9 MOUSE Q4W8Q9 mus musculus
 985 7 14.3 9 2 Q9QZAB MOUSE Q9QZAB mus musculus
 986 7 14.3 9 2 Q65711 BEV Q65711 berne virus
 987 7 14.3 9 2 Q66545 9GAMA Q66545 human herpe
 988 7 14.3 9 2 Q67605 SLCV Q67605 squash leaf
 989 7 14.3 9 2 Q67606 SLCV Q67606 squash leaf
 990 7 14.3 9 2 Q84333 SV40 Q84333 simian viru
 991 7 14.3 9 2 Q8QVD3 9MONO Q8QVD3 ovine respi
 992 7 14.3 9 2 Q88612 MIDDV Q88612 middelburg
 993 7 14.3 9 2 Q31653 ANSCE Q31653 aneer caeru
 994 7 14.3 9 2 Q5YDV1 9PERC Q5YDV1 xiphister m
 995 7 14.3 9 2 Q673X9 9CORV Q673X9 malacodonotus
 996 7 14.3 9 2 Q6Q7G0 RANRI Q6Q7G0 rana ridibu
 997 7 14.3 9 2 Q7SX77 GCONI Q7SX77 geochelone
 998 7 14.3 9 2 Q8AUM7 CARAU Q8AUM7 carassius a
 999 7 14.3 9 2 Q8AYL5 CARAU Q8AYL5 carassius a
 1000 7 14.3 9 2 Q8UTD7 9HIV1 Q8UTD7 human immun

ALIGNMENTS

RESULT 1
 Q05403_YEAST PRELIMINARY; PRT; 8 AA.
 ID Q05403;
 AC Q05403;
 DT 01-NOV-1996 (TrEMBLrel. 01, Created)
 DT 01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
 DT 01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
 DE Orf 00915 protein (Fragment).
 GN Name=orf 00915;
 OS Saccharomyces cerevisiae (Baker's yeast).
 OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
 OC Saccharomycetales; Saccharomycetaceae; Saccharomycetes.
 OX NCBI_TaxID=4932;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=FY1679;
 RX MEDLINE=96021609; PubMed=8533473;
 RA Zumetstein E., Pearson B.M., Kalogeropoulos A., Schweizer M.;
 RT "A 29.425 kb segment on the left arm of yeast chromosome XV contains
 RT more than twice as many unknown as known open reading frames.";
 RL Yeast 11:975-986(1995).
 DR EMBL; X83121; CAA58183.1; -; Genomic_DNA.
 FT NON TER 8
 SQ SEQUENCE 8 AA; 879 MW; 7B5322D2C441E058 CRC64;

Query Match 42.9%; Score 21; DB 2; Length 8;
 Best Local Similarity 75.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 6 HNV 9
 Db 2 HNV 5

RESULT 2
 FUSS_FUSSO STANDARD; PRT; 8 AA.
 ID FUSS_FUSSO
 AC P81010;
 DT 15-JUL-1998 (Rel. 36, Created)
 DT 15-JUL-1998 (Rel. 36, Last sequence update)
 DT 13-SEP-2005 (Rel. 48, Last annotation update)
 DE Allergen Fus s i3596* (Fragment).
 OS Fusarium solani subsp. pisi (Nectria haematococca)
 OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
 OC Hypocreomycetidae; Hypocreales; Nectriaceae; Nectria.
 OX NCBI_TaxID=70791;
 RN [1]
 RP PROTEIN SEQUENCE.

RC STRAIN=IARI 3596; TISSUE=Mycelium;
 RA Verma J., Gangal S.V.;
 RL Submitted (JUL-1997) to Swiss-Prot.
 CC -!- ALLERGEN: Causes an allergic reaction in human.
 CC -----
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 CC use as long as its content is in no way modified and this statement is not
 CC removed.
 CC -----
 CC Allergen; Direct protein sequencing.
 KW NON TER 8
 SQ SEQUENCE 8 AA; 898 MW; C372C441F5B69041 CRC64;

Query Match 36.7%; Score 18; DB 1; Length 8;
 Best Local Similarity 100.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 7 HNV 9
 Db 5 HNV 7

RESULT 3
 Q4VS04_MANSE PRELIMINARY; PRT; 8 AA.
 ID Q4VS04;
 AC Q4VS04;
 DT 13-SEP-2005 (TrEMBLrel. 31, Created)
 DT 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
 DT 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
 DE Calcium-activated potassium channel alpha subunit (Fragment).
 OS Manduca sexta (Tobacco hawkmoth) (Tobacco hornworm)
 OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 OC Neoptera; Megaloptera; Lepidoptera; Glossata; Ditrysia; Sphingioidea;
 OC Sphingidae; Sphinginae; Manduca.
 OX NCBI_TaxID=7130;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RA Keyser M.R., Witten J.L.;
 RT "Calcium-Activated Potassium Channel of the Tobacco Hornworm Manduca
 RT sexta: Molecular Characterization and Expression Analysis.";
 RL Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY644788; AAT44362.1; -; mRNA.
 KW Ionic channel.
 FT NON TER 1
 FT NON TER 8
 SQ SEQUENCE 8 AA; 785 MW; 80A1B771AAB7776D CRC64;

Query Match 36.7%; Score 18; DB 2; Length 8;
 Best Local Similarity 100.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 3 APP 5
 Db 1 APP 3

RESULT 4
 Q9J205_9HEPC PRELIMINARY; PRT; 8 AA.
 ID Q9J205_9HEPC
 AC Q9J205;
 DT 01-OCT-2000 (TrEMBLrel. 15, Created)
 DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
 DT 01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
 DE Truncated polyprotein (Fragment).
 OS Hepatitis C virus.
 OC Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
 OC Hepacivirus.
 OX NCBI_TaxID=11103;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=HC41;

RX MEDLINE=22089303; PubMed=12094871;
 RA Fan X., Di Bisceglie A.M.;
 RT "Genetic complexity and serum reactivity of HVR1 quasispecies of
 hepatitis C virus in patients with cirrhosis.";
 RL Am. J. Gastroenterol. 97:1489-1495(2002).
 DR EMBL: AF211054; AAF30114.1; -; Genomic_DNA.
 KW Polypeptide.
 FT NON_TER 1
 SQ SEQUENCE 8 AA; 917 MW; B1D41AF776DCA CRC64;

 Query Match 36.7%; Score 18; DB 2; Length 8;
 Best Local Similarity 100.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 APP 5
 DB 2 APP 4

 RESULT 5
 YBFR_AZOV
 ID YBFR_AZOV STANDARD; PRT; 9 AA.
 AC P25825;
 DT 01-MAY-1992 (Rel. 22, Created)
 DT 01-MAY-1992 (Rel. 22, Last sequence update)
 DT 13-SEP-2005 (Rel. 48, Last annotation update)
 DE Hypothetical protein in bfr 3'region (Fragment).
 OS Azotobacter vinelandii.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
 OC Pseudomonadaceae; Azotobacter.
 OX NCBI_TaxID=354;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].
 RX MEDLINE=92196129; PubMed=1549605;
 RA Grossman M.J., Hinton S.M., Minak-Bernero V., Slaughter C.,
 RA Stiefel E.L.;
 RT "Unification of the ferritin family of proteins.";
 RL Proc. Natl. Acad. Sci. U.S.A. 89:2419-2423(1992).
 CC -----
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 CC -----
 DR EMBL: M83692; AAA22122.1; -; Genomic_DNA.
 DR PIR: B41983; B41983.
 KW Hypothetical protein.
 FT NON_TER 9
 SQ SEQUENCE 9 AA; 947 MW; DF98B5A1B417776D CRC64;

 Query Match 36.7%; Score 18; DB 1; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 APP 5
 DB 2 APP 4

 RESULT 6
 Q6SP94_CHLRE
 ID Q6SP94_CHLRE PRELIMINARY; PRT; 9 AA.
 AC Q6SP94;
 DT 05-JUL-2004 (TReMBLrel. 27, Created)
 DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
 DE PF26 (Fragment).
 OS Chlamydomonas reinhardtii.
 OC Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae;
 OC Chlamydomonadales; Chlamydomonadaceae; Chlamydomonas.
 OX NCBI_TaxID=3055;
 RN [1]

RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=CC-2290;
 RX MEDLINE=22570934; PubMed=12684385; DOI=10.1128/EC.2.2.362-379.2003;
 RA Kathir P., LaVoie M., Brazelton W.J., Haas N.A., Lefebvre P.A.,
 RA Silflow C.D.;
 RT "Molecular map of the Chlamydomonas reinhardtii nuclear genome.";
 RL Eukaryot. Cell 2:362-379(2003).
 DR EMBL: AY54155; AAR20844.1; -; Genomic_DNA.
 FT NON_TER 1
 SQ SEQUENCE 9 AA; 1012 MW; DB0AAB1B1B0776D CRC64;

 Query Match 36.7%; Score 18; DB 2; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 APP 5
 DB 2 APP 4

 RESULT 7
 Q99193_PSEPU
 ID Q99193_PSEPU PRELIMINARY; PRT; 9 AA.
 AC Q99193;
 DT 01-NOV-1996 (TReMBLrel. 01, Created)
 DT 01-NOV-1996 (TReMBLrel. 01, Last sequence update)
 DT 01-MAR-2003 (TReMBLrel. 23, Last annotation update)
 DE RPOB beta-subunit of RNA polymerase (Fragment).
 OS Pseudomonas putida.
 OC Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
 OC Pseudomonadaceae; Pseudomonas.
 OX NCBI_TaxID=303;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RA Borodin A.M., Danilkovich A.V., Allikmets R.L., Rostapshov V.M.,
 RA Chernov I.P., Azhikina T.L., Monastyrskaya S., Sverdlov D.;
 RT "Nucleotide sequence of the rpoB gene coding for the beta-subunit of
 RNA polymerase in Pseudomonas putida.";
 RL Dokl. Biochem. 302:1261-1265(1988).
 DR EMBL: X15849; CAA33847.1; -; Genomic_DNA.
 FT NON_TER 9
 SQ SEQUENCE 9 AA; 852 MW; 5B4167776DC76727 CRC64;

 Query Match 36.7%; Score 18; DB 2; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 3 APP 5
 DB 5 APP 7

 RESULT 8
 Q84U84_SOYBN
 ID Q84U84_SOYBN PRELIMINARY; PRT; 9 AA.
 AC Q84U84;
 DT 01-JUN-2003 (TReMBLrel. 24, Created)
 DT 01-JUN-2003 (TReMBLrel. 24, Last sequence update)
 DT 01-JUN-2003 (TReMBLrel. 24, Last annotation update)
 DE Flavonoid 3'-hydroxylase (Fragment).
 OS Glycine max (Soybean).
 OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
 OC eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine.
 OX NCBI_TaxID=3847;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=22474238; PubMed=12586717;
 RA Zabala G., Vodkin L.;
 RT "Cloning of the pleiotropic T locus in soybean and two recessive
 RT alleles that differentially affect structure and expression of the
 RT encoded flavonoid 3' hydroxylase.";
 RL Genetics 163:295-309(2003).

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DR EMBL; AF495732; AAO47848.1; -; mRNA.
FT NON_TER 1
SQ SEQUENCE 9 AA; 978 MW; 25A0B685AB42C1F7 CRC64;

Query Match      34.7%; Score 17; DB 2; Length 9;
Best Local Similarity 42.9%; Pred. No. 2.2e+06;
Matches 3; Conservative 3; Mismatches 0; Gaps 0;

QY 3 APPVHNV 9
   ||| |:::
DB 1 APHVYSM 7

RESULT 9
ALL6_CVDPO STANDARD; PRT; 8 AA.
AC P82157;
DT 30-MAY-2000 (Rel. 39, Created)
DT 30-MAY-2000 (Rel. 39, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Cydastatin-6.
OS Cydia pomonella (Codling moth).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;
OC Tortricidae; Tortricidae; Olethreutinae; Cydia.
OX NCBI_TaxID=82600;
RN [1]
RP PROTEIN SEQUENCE.
RC TISSUE=Larva;
RX MEDLINE=98054539; PubMed=9392829; DOI=10.1016/S0196-9781(97)00188-5;
RA Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Winstanley D.,
RA Davey M., East P.D., Thorpe A.;
RT "Lepidopteran peptides of the allatostatin superfamily.";
RL Peptides 18:1301-1309(1997).
CC -!- SURCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: Belongs to the allatostatin family.
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CC use as long as its content is in no way modified and this statement is not
CC removed.
CC -----
KW Amidation; Direct protein sequencing; Neuropeptide.
FT MOD_RES 8 Leucine amide.
SQ SEQUENCE 8 AA; 936 MW; 0B2879C45B573767 CRC64;

Query Match      32.7%; Score 16; DB 1; Length 8;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 5 PVHNV 8
   ||| |:::
DB 2 PLYN 5

RESULT 10
Q6Y2F2_CITSI
ID Q6Y2F2_CITSI PRELIMINARY; PRT; 8 AA.
AC Q6Y2F2;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DE Vacuolar invertase (Fragment).
OS Citrus sinensis (Sweet orange).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids;
OC eucosida II; Sapindales; Rutaceae; Citrus.
OX NCBI_TaxID=2711;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA An X., Zhang S., Xu C., Qin Q.;
RL Submitted (DEC-2002) to the EMBL/GenBank/DBJ databases.
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DR EMBL; AY190016; AAO73818.1; -; Genomic_DNA.
FT NON_TER 8
SQ SEQUENCE 8 AA; 1013 MW; FE21E1FB4771AAA6 CRC64;

Query Match      32.7%; Score 16; DB 2; Length 8;
Best Local Similarity 40.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHNV 9
   ||| |:::
DB 4 PYHHL 8

RESULT 11
Q7M067_MOUSE
ID Q7M067_MOUSE PRELIMINARY; PRT; 8 AA.
AC Q7M067;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Tumor-associated antigen M0T1.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP PROTEIN SEQUENCE.
RX MEDLINE=94217811; PubMed=8164742; DOI=10.1038/369067a0;
RA Mandelboim O., Berke G., Fridkin M., Feldman M., Eisenstein M.,
RA Eisenbach L.;
RT "CTL induction by a tumour-associated antigen octapeptide derived from
RT a murine lung carcinoma.";
RL Nature 369:67-71(1994).
DR PIR; S43971; S43971.
SQ SEQUENCE 8 AA; 934 MW; 9976DDC1A456DB19 CRC64;

Query Match      32.7%; Score 16; DB 2; Length 8;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 STAPP 5
   ||| |
DB 4 NTAQP 8

RESULT 12
Q9P8E5_KLJULA
ID Q9P8E5_KLJULA PRELIMINARY; PRT; 9 AA.
AC Q9P8E5;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
DE HIS4 protein (Fragment).
OS Kluyveromyces fragilis (Yeast).
OC Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC Saccharomycetales; Saccharomycetaceae; Kluyveromyces.
OX NCBI_TaxID=28985;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=NRRL-Y1140;
RX MEDLINE=99449382; PubMed=10518937; DOI=10.1016/S0014-5793(99)01105-9;
RA Lamas-Macielas M., Esperanza Cerdan E., Freire-Picos M.A.;
RT "Kluyveromyces fragilis HIS4 transcriptional regulation: similarities
RT and differences to Saccharomyces cerevisiae HIS4 gene.";
RL FEBS Lett. 458:72-76(1999).
DR EMBL; AJ238494; CAB87125.1; -; Genomic_DNA.
FT NON_TER 9
SQ SEQUENCE 9 AA; 1015 MW; 5770D2D772D2D767 CRC64;

Query Match      32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 75.0%; Pred. No. 2.2e+06;
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Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 5 PVHN 8
Db 6 PVFN 9

RESULT 13
Q71UR3 HUMAN
ID Q71UR3 HUMAN PRELIMINARY; PRT; 9 AA.
AC Q71UR3;
DT 05-JUL-2004 (TRENBLrel. 27, Created)
DT 05-JUL-2004 (TRENBLrel. 27, Last sequence update)
DE Collagen type XII alpha 1 (Fragment).
GN Name=COL12A1;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=99041554; PubMed=9826181;
RA Chiquet M., Mumenthaler U., Wittwer M., Jin W., Koch M.;
RT "The chick and human collagen alpha(XII) gene promoter. activity of
RT highly conserved regions around the first exon and in the first
RT intron.";
RL Eur. J. Biochem. 257:362-371(1998).
DR EMBL; AF061871; AAC83578.1; -; Genomic_DNA.
KW Collagen.
FT NON TER 9
SQ SEQUENCE 9 AA; 1040 MW; 6214C77673415A4 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 STAPP 5
Db 3 SRLPP 7

RESULT 14
Q72ZE2 HUMAN
ID Q72ZE2 HUMAN PRELIMINARY; PRT; 9 AA.
AC Q72ZE2;
DT 01-OCT-2003 (TRENBLrel. 25, Created)
DT 01-OCT-2003 (TRENBLrel. 25, Last sequence update)
DE RPS6KA3 protein (Fragment).
GN Name=RPS6KA3;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=22763540; PubMed=12777533; DOI=10.1093/molbev/msg134;
RA Kitano T., Schwarz C., Nickel B., Paabo S.;
RT "Gene diversity patterns at 10 X-chromosomal loci in humans and
RT chimpanzees.";
RL Mol. Biol. Evol. 20:1281-1289(2003).
DR EMBL; AB102341; BAC80840.1; -; Genomic_DNA.
DR EMBL; AB102342; BAC80841.1; -; Genomic_DNA.
DR EMBL; AB102343; BAC80842.1; -; Genomic_DNA.
DR EMBL; AB102344; BAC80843.1; -; Genomic_DNA.
DR EMBL; AB102345; BAC80844.1; -; Genomic_DNA.
DR EMBL; AB102346; BAC80845.1; -; Genomic_DNA.
DR EMBL; AB102347; BAC80846.1; -; Genomic_DNA.
DR EMBL; AB102348; BAC80847.1; -; Genomic_DNA.
DR EMBL; AB102349; BAC80848.1; -; Genomic_DNA.

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DR EMBL; AB102350; BAC80849.1; -; Genomic_DNA.
DR EMBL; AB102351; BAC80850.1; -; Genomic_DNA.
DR EMBL; AB102352; BAC80851.1; -; Genomic_DNA.
DR EMBL; AB102353; BAC80852.1; -; Genomic_DNA.
DR EMBL; AB102354; BAC80853.1; -; Genomic_DNA.
DR EMBL; AB102355; BAC80854.1; -; Genomic_DNA.
DR EMBL; AB102356; BAC80855.1; -; Genomic_DNA.
DR EMBL; AB102357; BAC80856.1; -; Genomic_DNA.
DR EMBL; AB102358; BAC80857.1; -; Genomic_DNA.
DR EMBL; AB102359; BAC80858.1; -; Genomic_DNA.
DR EMBL; AB102360; BAC80859.1; -; Genomic_DNA.
FT NON TER 1
FT NON TER 9
SQ SEQUENCE 9 AA; 939 MW; D8C6C045B1F2C862 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 6 VHNV 9
Db 4 VHSI 7

RESULT 15
Q7YQC2 PANTR
ID Q7YQC2 PANTR PRELIMINARY; PRT; 9 AA.
AC Q7YQC2;
DT 01-OCT-2003 (TRENBLrel. 25, Created)
DT 01-OCT-2003 (TRENBLrel. 25, Last sequence update)
DE RPS6KA3 protein (Fragment).
GN Name=RPS6KA3;
OS Pan troglodytes verus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Pan.
OX NCBI_TaxID=37012;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=22763540; PubMed=12777533; DOI=10.1093/molbev/msg134;
RA Kitano T., Schwarz C., Nickel B., Paabo S.;
RT "Gene diversity patterns at 10 X-chromosomal loci in humans and
RT chimpanzees.";
RL Mol. Biol. Evol. 20:1281-1289(2003).
DR EMBL; AB102361; BAC80860.1; -; Genomic_DNA.
DR EMBL; AB102362; BAC80861.1; -; Genomic_DNA.
DR EMBL; AB102363; BAC80862.1; -; Genomic_DNA.
FT NON TER 1
FT NON TER 9
SQ SEQUENCE 9 AA; 939 MW; D8C6C045B1F2C862 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
QY 6 VHNV 9
Db 4 VHSI 7

RESULT 16
Q7YQC3 PANTR
ID Q7YQC3 PANTR PRELIMINARY; PRT; 9 AA.
AC Q7YQC3;
DT 01-OCT-2003 (TRENBLrel. 25, Created)
DT 01-OCT-2003 (TRENBLrel. 25, Last sequence update)
DE RPS6KA3 protein (Fragment).
GN Name=RPS6KA3;
OS Pan troglodytes troglodytes.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;

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OC Pan.
OX NCBI_TaxID=37011;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=22763540; PubMed=12777533; DOI=10.1093/molbev/msg134;
RA Kitano T., Schwarz C., Nickel B., Paabo S.;
RT "Gene diversity patterns at 10 X-chromosomal loci in humans and
RT chimpanzees";
RL Mol. Biol. Evol. 20:1281-1289(2003).
DR EMBL; AB102364; BAC80863.1; -; Genomic DNA.
DR EMBL; AB102365; BAC80864.1; -; Genomic DNA.
DR EMBL; AB102366; BAC80865.1; -; Genomic DNA.
DR EMBL; AB102367; BAC80866.1; -; Genomic DNA.
DR EMBL; AB102368; BAC80867.1; -; Genomic DNA.
DR EMBL; AB102369; BAC80868.1; -; Genomic DNA.
DR EMBL; AB102370; BAC80869.1; -; Genomic DNA.
FT NON_TER 1
FT NON_TER 9
SQ SEQUENCE 9 AA; 939 MW; D8C6C045B1P2C862 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 6 VHNV 9
DB 4 VHSI 7

RESULT 17
Q76FU1_9FLOR PRELIMINARY; PRT; 9 AA.
AC Q76FU1;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
DE Rubisco large subunit (Fragment).
GN Name=rbcl;
OS Plocamium telfairiae.
OC Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Plocamiales; Plocamiaceae;
OC Plocamium.
OX NCBI_TaxID=38522;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Yano T., Kamiya M., Arai S., Kawai H.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB104699; BAC82401.1; -; Genomic DNA.
DR EMBL; AB104702; BAC82407.1; -; Genomic DNA.
DR EMBL; AB104703; BAC82409.1; -; Genomic DNA.
DR EMBL; AB104705; BAC82413.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
FT NON_TER 9
SQ SEQUENCE 9 AA; 993 MW; CA1A55A1B771AB02 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTSNV 9

RESULT 18
Q76FU5_9FLOR PRELIMINARY; PRT; 9 AA.
AC Q76FU5;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Rubisco large subunit (Fragment).

GN Name=rbcl;
OS Plocamium serrulatum.
OC Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Plocamiales; Plocamiaceae;
OC Plocamium.
OX NCBI_TaxID=223160;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Yano T., Kamiya M., Arai S., Kawai H.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB104697; BAC82397.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
FT NON_TER 9
SQ SEQUENCE 9 AA; 979 MW; CA1A55A1B771AB2 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTSNV 9

RESULT 19
Q76FU7_9FLOR PRELIMINARY; PRT; 9 AA.
AC Q76FU7;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE Rubisco large subunit (Fragment).
GN Name=rbcl;
OS Plocamium recurvatum.
OC Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Plocamiales; Plocamiaceae;
OC Plocamium.
OX NCBI_TaxID=223159;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Yano T., Kamiya M., Arai S., Kawai H.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB104696; BAC82395.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
FT NON_TER 9
SQ SEQUENCE 9 AA; 993 MW; CA1A55A1B771AB02 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTSNV 9

RESULT 20
Q76FV1_9FLOR PRELIMINARY; PRT; 9 AA.
AC Q76FV1;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
DE Rubisco large subunit (Fragment).
GN Name=rbcl;
OS Plocamium ovicornis.
OC Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Plocamiales; Plocamiaceae;
OC Plocamium.
OX NCBI_TaxID=223158;
RN [1]

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RP NUCLEOTIDE SEQUENCE.
RA Yano T., Kamiya M., Arai S., Kawai H.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB104694; BAC82389.1; -; Genomic DNA.
DR EMBL; AB104693; BAC82389.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER
SQ SEQUENCE 9 AA; 979 MW; CA1A55A1B771AAB2 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTSNV 9

RESULT 21
ID Q76FV7_PLOCA
AC Q76FV7_PLOCA PRELIMINARY; PRT; 9 AA.
DT 05-JUL-2004 (TReMBLrel. 27, Created)
DT 05-JUL-2004 (TReMBLrel. 27, Last sequence update)
DT 01-FEB-2005 (TReMBLrel. 29, Last annotation update)
DE Rubisco large subunit (Fragment).
GN Name=rbcL;
OS Plocamium cartilagineum (Red comb weed).
OC Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Plocamiales; Plocamiaceae;
OC Plocamium.
OX NCBI_TaxID=31452;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Yano T., Kamiya M., Arai S., Kawai H.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AB104691; BAC82385.1; -; Genomic DNA.
DR EMBL; AB104692; BAC82387.1; -; Genomic DNA.
DR EMBL; AB104690; BAC82383.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER
SQ SEQUENCE 9 AA; 993 MW; CA1A55A1B771AAB02 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTSNV 9

RESULT 22
ID Q64972_AVEVR
AC Q64972_AVEVR PRELIMINARY; PRT; 9 AA.
DT 01-NOV-1996 (TReMBLrel. 01, Created)
DT 01-NOV-1996 (TReMBLrel. 01, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE Rous associated virus type 1 (RAV-1) ml protein, 3' end, and env
protein (Fragment).
DE Avian rous-associated virus type 1.
OC Viruses; Retroid viruses; Retroviridae; Alpharetrovirus.
OX NCBI_TaxID=11950;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=89037349; PubMed=2846875;
RA Marx M., Criaenti P., Eychene A., Bechade C., Laugier D.,
RA Ghyssdael J., Pessac B., Calochy G.;
RT "Activation and transduction of c-mil sequences in chicken neuroretina
cells induced to proliferate by infection with avian lymphomatosis

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RT virus.";
RL J. Virol. 62:4627-4633 (1988).
DR EMBL; M25399; AAA42548.1; -; Genomic_DNA.
FT NON_TER
SQ SEQUENCE 9 AA; 1033 MW; 83AED7673411B5A1 CRC64;

Query Match 32.7%; Score 16; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPV 6
DB 3 STRLPV 8

RESULT 23
ID P83492_BIOOC
AC P83492_BIOOC PRELIMINARY; PRT; 7 AA.
DT 01-JUN-2003 (TReMBLrel. 24, Created)
DT 01-JUN-2003 (TReMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TReMBLrel. 26, Last annotation update)
DE Alkaline protease Gr3 (EC 3.4.21.-) (Fragment).
OS Bionectria ochroleuca (Gliocladium roseum).
OC Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
OC Hypocreomycetidae; Hypocreales; Bionectriaceae; Bionectria.
OX NCBI_TaxID=29856;
RN [1]
RP PROTEIN SEQUENCE, FUNCTION, AND SUBCELLULAR LOCATION.
RC STRAIN=Gr87;
RA Zhao M., Zhang K.;
RL Submitted (DEC-2002) to Swiss-Prot.
CC -!- FUNCTION: Acts as a serine protease.
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S8.
DR GO; GO:0005576; C:extracellular region; NAS.
DR GO; GO:0004252; F:serine-type endopeptidase activity; NAS.
DR InterPro; IPR000209; Pept S8_S53.
DR PROSITE; PS00136; SUBTILASE_ASP; PARTIAL.
DR PROSITE; PS00137; SUBTILASE_HIS; PARTIAL.
DR PROSITE; PS00138; SUBTILASE_SER; PARTIAL.
KW Hydrolase; Serine protease.
FT NON_TER
SQ SEQUENCE 7 AA; 688 MW; 776DD455A6C1ADB0 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 7;
Best Local Similarity 75.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 STAP 4
DB 4 SNAP 7

RESULT 24
ID ACI_THUAL
AC ACI_THUAL STANDARD; PRT; 8 AA.
DT 01-NOV-1990 (Rel. 16, Created)
DT 01-NOV-1990 (Rel. 16, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Angiotensin-converting enzyme inhibitor.
OS Thunnus albacares (Yellowfin tuna) (Neothunnus macropterus).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Scombroidei;
OC Scombridae; Thunnus.
OX NCBI_TaxID=8236;
RN [1]
RP PROTEIN SEQUENCE.
RC TISSUE=Muscle;
RX MEDLINE=88326322; PubMed=3415688;
RA Kohama Y., Matsumoto S., Oka H., Teramoto T., Okabe M., Mimura T.;

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RT "Isolation of angiotensin-converting enzyme inhibitor from tuna
RL muscle."; Biophys. Res. Commun. 155:332-337(1988).
RC Biochem. J. 231:1-6(1986).
CC -!- FUNCTION: Inhibits angiotensin-converting enzyme.
CC -----
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.
CC -----
DR PIR; A31570; A31570.
KW Direct protein sequencing; Metalloenzyme inhibitor;
KW Metalloprotease inhibitor. 6A863733051F1B7 CRC64;
SQ SEQUENCE 8 AA; 953 MW; 6A863733051F1B7 CRC64;

Query Match 30.6%; Score 15; DB 1; Length 8;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVH 7
DB 1 PTH 3

RESULT 25
ID PPK2_PERAM STANDARD; PRT; 8 AA.
AC P82692;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 10-MAY-2005 (Rel. 47, Last annotation update)
DE Pyrokinin-2 (Pea-PK-2) (FXPRIL-amide).
OS Periplaneta americana (American cockroach).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattodea;
OC Blattidae; Blattellinae; Periplaneta.
OX NCBI_TaxID=6978;
RN [1]
RP PROTEIN SEQUENCE, FUNCTION, AND MASS SPECTROMETRY.
RC TISSUE=Corpora cardiaca;
RX MEDLINE=97353923; PubMed=9210163; DOI=10.1016/S0196-9781(97)00067-3;
RA Predel R., Kellner R., Kaufmann R., Penzlin H., Gaede G.;
RT "Isolation and structural elucidation of two pyrokinins from the
RL retrocerebral complex of the American cockroach.";
RN Peptides 18:473-478(1997).
RN [2]
RP TISSUE SPECIFICITY.
RX MEDLINE=20189894; PubMed=10723010;
RA Predel R., Eckert M.;
RT "Tagma-specific distribution of FXPRLamides in the nervous system of
RL the American cockroach.";
RC J. Comp. Neurol. 419:352-363(2000).
CC -!- FUNCTION: Mediates visceral muscle contractile activity (myotropic
CC activity).
CC -!- SUBCELLULAR LOCATION: Secreted.
CC -!- TISSUE SPECIFICITY: Corpora cardiaca.
CC -!- MASS SPECTROMETRY: MW=883; METHOD=MALDI; RANGE=1-8; NOTE=Ref.1.
CC -!- SIMILARITY: Belongs to the pyrokinin family.
CC -----
CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.
CC -----
DR InterPro; IPR001484; Pyrokinin.
KW PROSITE; PS00539; PYROKININ; FALSE_NEG.
KW Amidation; Direct protein sequencing; Neuropeptide; Pyrokinin.
FT MOD_RES 8 Leucine amide.
SQ SEQUENCE 8 AA; 884 MW; C834176DD9D7775 CRC64;

Query Match 30.6%; Score 15; DB 1; Length 8;
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Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 3 APP 5
DB 1 SPP 3

RESULT 26
ID Q6JORS_PARLI PRELIMINARY; PRT; 8 AA.
AC Q6JORS;
DT 05-JUL-2004 (TrEMBLrel. 27, Created)
DT 05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
DE AUF1 similar protein (Fragment).
OS Paracentrotus lividus (Common sea urchin).
OC Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Echinozoa;
OC Echinoidea; Euechinoidea; Echinacea; Echinoida; Echinidae;
OC Paracentrotus.
OX NCBI_TaxID=7856;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX PubMed=15715964;
RA Pulcrano G., Leonardo R., Aniello F., Mancini P., Piscopo M.,
RA Branno M., Fucci L.;
RT "PLAUF is a novel P. lividus sea urchin RNA-binding protein.";
RL Gene 347:99-107(2005).
DR EMBL; AY609061; AAT37156.1; -; mRNA.
FT NON_TER 1
SQ SEQUENCE 8 AA; 816 MW; 83C7633DC1A865A6 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 8;
Best Local Similarity 75.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 TAPP 5
DB 4 TAKP 7

RESULT 27
ID Q7M1V6_SOLTU PRELIMINARY; PRT; 8 AA.
AC Q7M1V6;
DT 01-MAR-2004 (TrEMBLrel. 26, Created)
DT 01-MAR-2004 (TrEMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE Lectin (Fragment).
OS Solanum tuberosum (Potato).
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
OC asterids; lamiales; Solanales; Solanaceae; Solanum.
OX NCBI_TaxID=4113;
RN [1]
RP PROTEIN SEQUENCE.
RA Millar D.J., Allen A.K., Smith C.G., Sidebottom C., Slabas A.R.,
RA Bolwell G.P.;
RT "Chitin-binding proteins in potato (Solanum tuberosum L.) tuber.
RT Characterization, immunolocalization and effects of wounding.";
RL Biochem. J. 283:813-821(1992).
RN [2]
RP PROTEIN SEQUENCE.
RX PubMed=1590771;
RA Millar D.J., Allen A.K., Smith C.G., Sidebottom C., Slabas A.R.,
RA Bolwell G.P.;
RT "Chitin-binding proteins in potato (Solanum tuberosum L.) tuber.
RT Characterization, immunolocalization and effects of wounding.";
RL Biochem. J. 283 ( Pt 3):813-821(1992).
DR PIR; S21288; S21288.
FT NON_TER 1
FT NON_TER 8
SQ SEQUENCE 8 AA; 771 MW; C3775A771B5BDDA CRC64;
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Query Match      30.6%; Score 15; DB 2; Length 8;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      3 APP 5
      :||
Db      6 SPP 8

RESULT 28
Q9UCS8 HUMAN
ID Q9UCS8_HUMAN PRELIMINARY; PRT; 9 AA.
AC Q9UCS8;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Apolipoprotein A-I (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP PROTEIN SEQUENCE.
RX MEDLINE=92075698; PubMed=1742316; DOI=10.1016/0005-2760(91)90167-G;
RA Ehnholm C., Bozas S.E., Tenknen H., Kirszbaum L., Metso J.,
RA Murphy B., Walker I.D.;
RT "The apolipoprotein A-I binding protein of placenta and the SP-40,40
RT protein of human blood are different proteins which both bind to
RT apolipoprotein A-I.";
RL Biochim. Biophys. Acta 1086:255-260(1991).
DR GO; GO:0005576; C:extracellular region; ISS.
DR GO; GO:0005319; F:lipid transporter activity; NAS.
DR GO; GO:0008203; P:cholesterol metabolism; ISS.
DR GO; GO:0006869; F:lipid transport; ISS.
FT NON TER 1
FT NON TER 9
SQ SEQUENCE 9 AA; 981 MW; 7FE37775A6C7776B CRC64;

Query Match      30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      3 APP 5
      :||
Db      6 SPP 8

RESULT 29
Q16605 HUMAN
ID Q16605_HUMAN PRELIMINARY; PRT; 9 AA.
AC Q16605;
DT 01-NOV-1996 (TREMBLrel. 01, Created)
DT 01-NOV-1996 (TREMBLrel. 01, Last sequence update)
DT 01-FEB-2005 (TREMBLrel. 29, Last annotation update)
DE GST2 protein (Glutathione S-transferase) (Fragment).
GN Name=GST2;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX PubMed=3138230;
RA Chow N.W., Whang-Peng J., Kao-Shan C.S., Tam M.F., Lai H.-C.J.,
RA Tu C.-P.D.;
RT "Human glutathione S-transferases. The Ha multigene family encodes
RT products of different but overlapping substrate specificities.";
RL J. Biol. Chem. 263:12797-12800(1988).
DR EMBL; M21867; AAA52617.1; -; Genomic DNA.
DR EMBL; M21866; AAA35938.1; -; Genomic DNA.

DR GO; GO:0004364; F:glutathione transferase activity; NAS.
KW GO:0009636; P:response to toxin; NAS.
FT NON TER 9
SQ SEQUENCE 9 AA; 1116 MW; D168E72327633B1D CRC64;

Query Match      30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      4 PPVH 7
      :||
Db      5 PKLH 8

RESULT 30
Q7M3S5 9TRYP
ID Q7M3S5_9TRYP PRELIMINARY; PRT; 9 AA.
AC Q7M3S5;
DT 01-MAR-2004 (TREMBLrel. 26, Created)
DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Phosphoenolpyruvate carboxykinase.
OS Trypanosoma brucei.
OC Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Trypanosoma.
OX NCBI_TaxID=5691;
RN [1]
RP PROTEIN SEQUENCE.
RX MEDLINE=95284106; PubMed=7766679; DOI=10.1016/0167-4838(95)00061-X;
RA Hunt M., Koehler P.;
RT "Purification and characterization of phosphoenolpyruvate
RT carboxykinase from Trypanosoma brucei.";
RL Biochim. Biophys. Acta 1249:15-22(1995).
DR PIR; S55696; S55696.
SQ SEQUENCE 9 AA; 1063 MW; 35F2244331E05047 CRC64;

Query Match      30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY      4 PPVH 7
      :||
Db      2 PIH 5

RESULT 31
Q7R8X5 PLAYO
ID Q7R8X5_PLAYO PRELIMINARY; PRT; 9 AA.
AC Q7R8X5;
DT 01-MAR-2004 (TREMBLrel. 26, Created)
DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Hypothetical protein.
GN Name=PY07095;
OS Plasmodium yoelii yoelii.
OC Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
OX NCBI_TaxID=73239;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=17XNL;
RX MEDLINE=22255706; PubMed=12368865; DOI=10.1038/nature01099;
RA Carlton J.M., Anguilo S.V., Suh B.B., Kooij T.W., Perte M.,
RA Silva J.C., Ermolaeva M.D., Allen J.E., Selengut J.D., Koo H.L.,
RA Peterson J.D., Pop M., Kosack D.S., Shumway M.F., Bidwell S.L.,
RA Shalloom S.J., van Aken S.E., Riedmuller S.B., Feldblyum T.V.,
RA Cho J.K., Quackenbush J., Sedegah M., Shoabai A., Cummings L.M.,
RA Florens L., Yates J.R. III, Raine J.D., Sinden R.E., Harris M.A.,
RA Cunningham D.A., Preiser P.R., Bergman L.W., Vaidya A.B.,
RA van Lin L.H., Janse C.J., Waters A.P., Smith H.O., White O.R.,
RA Salzberg S.L., Venter J.C., Fraser C.M., Hoffman S.L., Gardner M.J.,
RA Carucci D.J.;
RT "Genome sequence and comparative analysis of the model rodent malaria
RT parasite Plasmodium yoelii yoelii.";
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RL Nature 419:512-519 (2002).
CC -!- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; AABL01002528; EAA19452.1; -; Genomic_DNA.
KW Hypothetical protein.
SQ SEQUENCE 9 AA; 1013 MW; 4684D44724441E7 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 6 VHN 8
Db 2 LHN 4

RESULT 32
ID Q4X981_PLACH PRELIMINARY; PRT; 9 AA.
AC Q4X981;
DT 13-SEP-2005 (TrEMBLrel. 31, Created)
DT 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
DE Hypothetical protein (Fragment).
GN ORFNames=PC404684.00.0;
OS Plasmodium chabaudi.
OC Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
OX NCBI_TaxID=5825;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Hall N., Karras M., Raine J.D., Carlton J.M., Koolij T.W.A.,
RA Berriman M., Florens L., Janssen C.S., Pain A., Christophides G.K.,
RA James K., Rutherford K., Harris B., Trueman H.E., Mendoza J.,
RA Bidwell S.L., Rajandream M.A., Carucci D.J., Yates J.R., Kafatos F.C.,
RA Janse C.J., Barrell B., Turner C.M.R., Waters A.P., Sinden R.S.;
RA "A comprehensive survey of the Plasmodium life cycle by genomic,
RT transcriptomic, and proteomic analyses.";
RL Science 307:82-86(2005).
CC -!- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; CAJ01008648; CAH86543.1; -; Genomic_DNA.
KW Hypothetical protein.
FT NON_TER 1
SQ SEQUENCE 9 AA; 1010 MW; 495F4441B6905727 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 6 VHN 8
Db 5 MHN 7

RESULT 33
ID Q4YFU0_PLABE PRELIMINARY; PRT; 9 AA.
AC Q4YFU0;
DT 13-SEP-2005 (TrEMBLrel. 31, Created)
DT 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
DE Hypothetical protein.
GN ORFNames=PB404205.00.0;
OS Plasmodium berghei.
OC Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
OX NCBI_TaxID=5821;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Hall N., Karras M., Raine J.D., Carlton J.M., Koolij T.W.A.,
RA Berriman M., Florens L., Janssen C.S., Pain A., Christophides G.K.,

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RA James K., Rutherford K., Harris B., Trueman H.E., Mendoza J.,
RA Quail M.A., Ormond D., Doggett J., Carucci D.J., Yates J.R., Kafatos F.C.,
RA Bidwell S.L., Rajandream M.A., Turner C.M.R., Waters A.P., Sinden R.S.;
RA "A comprehensive survey of the Plasmodium life cycle by genomic,
RT transcriptomic, and proteomic analyses.";
RL Science 307:82-86(2005).
CC -!- CAUTION: The sequence shown here is derived from an
CC EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is
CC preliminary data.
DR EMBL; CAA101005534; CAI03128.1; -; Genomic_DNA.
KW Hypothetical protein.
SQ SEQUENCE 9 AA; 1089 MW; AE5FD1E04B476056 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 PPVH 7
Db 4 PYIH 7

RESULT 34
ID Q5G6L3_RHIHA PRELIMINARY; PRT; 9 AA.
AC Q5G6L3;
DT 10-MAY-2005 (TrEMBLrel. 30, Created)
DT 10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
DE Amyloid beta protein (Fragment).
GN Name=APP;
OS Rhinopoma hardwickei (Lesser mouse-tailed bat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Laurasiatheria; Chiroptera; Microchiroptera;
OC Rhinopomatidae; Rhinopoma.
OX NCBI_TaxID=124756;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RX PubMed=15681385; DOI=10.1126/science.1105113;
RA Teeling E.C., Springer M.S., Madsen O., Bates P., O'Brien S.J.,
RA Murphy W.J.;
RT "A molecular phylogeny for bats illuminates biogeography and the
RT fossil record.";
RL Science 307:580-584(2005).
DR EMBL; AY834465; AAV92991.1; -; Genomic_DNA.
FT NON_TER 1
SQ SEQUENCE 9 AA; 1243 MW; 5D3CE686DB19C9C3 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 6 VHN 8
Db 7 MHN 9

RESULT 35
ID O81962_9FLOR PRELIMINARY; PRT; 9 AA.
AC O81962;
DT 01-NOV-1998 (TrEMBLrel. 08, Created)
DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT 01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE Ribulose 1,5-bisphosphate carboxylase/oxygenase large subunit
DE (Fragment).
GN Name=rbcl;
OS Caloglossa apomeiotica.
OC Eukaryota; Rhodophyta; Florideophyceae; Ceramiales; Delesseriaceae;
OC Caloglossa.
OX NCBI_TaxID=76904;
RN [1]

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RP NUCLEOTIDE SEQUENCE.

RC STRAIN=910;
 RA Kamiya M., West J.A., King R.J., Zuccarello G.C., Tanaka J., Hara Y.;
 RT "Evolutionary divergence in the red algae Caloglossa lepriurii and C.
 apomeiotica."; (Fragment).
 RL J. Phycol. 34:361-370(1998).
 RN [2]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=910;
 RA Kamiya M., Tanaka J., King R.J., West J.A., Zuccarello G.C., Kawai H.;
 RT "Reproductive and genetic distinction between broad and narrow
 entities of Caloglossa continua (Delesseriaceae, Rhodophyta).";
 RL Phycologia 38:356-367(1999).
 DR EMBL; D89948; BAA31281.1; -; Genomic_DNA.
 FT NON TER 1
 SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;

Best Local Similarity 60.0%; Pred. No. 2.2e+06;

Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 PVHNV 9

Db 5 PTANV 9

RESULT 36

081964_9FLOR PRELIMINARY; PRT; 9 AA.

AC 081964; Q9T388;

DT 01-NOV-1998 (TREMELrel. 08, Created)

DT 01-NOV-1998 (TREMELrel. 08, Last sequence update)

DT 01-FEB-2005 (TREMELrel. 29, Last annotation update)

DE Ribulose 1,5-bisphosphate carboxylase/oxygenase large subunit

DE (Fragment).
 GN Name=rbcl;
 OS Caloglossa continua.
 OG Chloroplast.
 OC Eukaryota; Rhodophyta; Florideophyceae; Ceramiales; Delesseriaceae;
 CC Caloglossa.
 OX NCBI_TaxID=76905;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=639;
 RA Kamiya M., West J.A., King R.J., Zuccarello G.C., Tanaka J., Hara Y.;
 RT "Evolutionary divergence in the red algae Caloglossa lepriurii and C.
 apomeiotica."; (Fragment).
 RL J. Phycol. 34:361-370(1998).
 RN [2]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=639, 500, and 729;
 RA Kamiya M., Tanaka J., King R.J., West J.A., Zuccarello G.C., Kawai H.;
 RT "Reproductive and genetic distinction between broad and narrow
 entities of Caloglossa continua (Delesseriaceae, Rhodophyta).";
 RL Phycologia 38:356-367(1999).
 DR EMBL; D89950; BAA31285.1; -; Genomic_DNA.
 DR EMBL; AB023379; BAA88908.1; -; Genomic_DNA.
 DR EMBL; AB023380; BAA88910.1; -; Genomic_DNA.
 DR GO; GO:0009507; C:chloroplast; IEA.
 KW Chloroplast.
 FT NON TER 1
 SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;

Best Local Similarity 60.0%; Pred. No. 2.2e+06;

Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 PVHNV 9

Db 5 PTANV 9

RESULT 37

081966_9FLOR

ID 081966_9FLOR PRELIMINARY; PRT; 9 AA.

AC 081966; Q9TJ87;

DT 01-NOV-1998 (TREMELrel. 08, Created)

DT 01-NOV-1998 (TREMELrel. 08, Last sequence update)

DT 01-FEB-2005 (TREMELrel. 29, Last annotation update)

DE Ribulose 1,5-bisphosphate carboxylase/oxygenase large subunit

DE (Fragment).
 GN Name=rbcl;
 OS Caloglossa monosticha.
 OG Chloroplast.
 OC Eukaryota; Rhodophyta; Florideophyceae; Ceramiales; Delesseriaceae;
 CC Caloglossa.
 OX NCBI_TaxID=76906;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=892;
 RA Kamiya M., West J.A., King R.J., Zuccarello G.C., Tanaka J., Hara Y.;
 RT "Evolutionary divergence in the red algae Caloglossa lepriurii and C.
 apomeiotica."; (Fragment).
 RL J. Phycol. 34:361-370(1998).
 RN [2]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=892, and 987;
 RA Kamiya M., Tanaka J., King R.J., West J.A., Zuccarello G.C., Kawai H.;
 RT "Reproductive and genetic distinction between broad and narrow
 entities of Caloglossa continua (Delesseriaceae, Rhodophyta).";
 RL Phycologia 38:356-367(1999).
 RN [3]
 RP NUCLEOTIDE SEQUENCE.
 RC STRAIN=D571;
 RA West J.A., Zuccarello G.C., Kamiya M.;
 RT "Reproductive patterns of Caloglossa species (Delesseriaceae,
 Rhodophyta) from Australia and New Zealand: multiple origins of
 asexuality in C. lepriurii. Literature review on apomixis, mixed-
 phase, bisexuality and sexual compatibility.";
 RL Phycol. Res. 49:183-200(2001).
 DR EMBL; D89960; BAA31305.1; -; Genomic_DNA.
 DR EMBL; AF340178; AAK98083.1; -; Genomic_DNA.
 DR EMBL; AF340179; AAK98085.1; -; Genomic_DNA.
 DR EMBL; AF340180; AAK98087.1; -; Genomic_DNA.
 DR EMBL; AB023381; BAA88912.1; -; Genomic_DNA.
 DR GO; GO:0009507; C:chloroplast; IEA.
 KW Chloroplast.
 FT NON TER 1
 SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;

Best Local Similarity 60.0%; Pred. No. 2.2e+06;

Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 PVHNV 9

Db 5 PTANV 9

RESULT 38

081968_9FLOR

ID 081968_9FLOR PRELIMINARY; PRT; 9 AA.

AC 081968; Q95BY3;

DT 01-NOV-1998 (TREMELrel. 08, Created)

DT 01-NOV-1998 (TREMELrel. 08, Last sequence update)

DT 01-FEB-2005 (TREMELrel. 29, Last annotation update)

DE Ribulose 1,5-bisphosphate carboxylase/oxygenase large subunit

DE (Fragment).
 GN Name=rbcl;
 OS Caloglossa ogasawaraensis.
 OG Chloroplast.
 OC Eukaryota; Rhodophyta; Florideophyceae; Ceramiales; Delesseriaceae;
 CC Caloglossa.
 OX NCBI_TaxID=76907;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.

```

RC STRAIN=596;
RA Kamiya M., West J.A., King R.J., Zuccarello G.C., Tanaka J., Hara Y.;
RT "Evolutionary divergence in the red algae Caloglossa lepreurii and C.
RT aponeiotica";
RL J. Phycol. 34:361-370(1998).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=596;
RA Kamiya M., Tanaka J., King R.J., West J.A., Zuccarello G.C., Kawai H.;
RT "Reproductive and genetic distinction between broad and narrow
RT entities of Caloglossa continua (Delesseriaceae, Rhodophyta).";
RL Phycologia 38:356-367(1999).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RA West J.A., Zuccarello G.C., Kamiya M.;
RT "Reproductive patterns of Caloglossa species (Delesseriaceae,
RT Rhodophyta) from Australia and New Zealand: multiple origins of
RT asexuality in C. lepreurii. Literature review on apomixis, mixed-
RT phase, bisexuality and sexual compatibility.";
RL Phycol. Res. 49:183-200(2001).
DR EMBL: D89961; BAA31307.1; -: Genomic DNA.
DR EMBL: AF340182; AAK98091.1; -: Genomic DNA.
DR GO: GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTANV 9

RESULT 39
ID Q6EUV8 GERHY PRELIMINARY; PRT; 9 AA.
AC Q6EUV8;
DT 25-OCT-2004 (TREMBlrel. 28, Created)
DT 25-OCT-2004 (TREMBlrel. 28, Last sequence update)
DE Hypothetical protein.
OS Gerbera hybrida.
OC Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC campanulids; Asterales; Asteraceae; Mutisioideae; Mutisieae; Gerbera.
OC NCBI_TaxID=18101;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Uimari A., Kotilainen M., Elomaa P., Yu D., Albert V.A., Teeri T.H.;
RT "Integration of reproductive meristem fates by a SEPALLATA-like MADS
RT box gene.";
RL Proc. Natl. Acad. Sci. U.S.A. 101:15817-15822(2004).
DR EMBL: AJ784156; CAH04877.1; -: mRNA.
KW Hypothetical protein.
SQ SEQUENCE 9 AA; 1108 MW; 151D41F5A401F1A0 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.2e+06;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 7 HNV 9
DB 7 HNL 9

RESULT 40
ID Q76FS7_9FLOR
AC Q76FS7;
DT 05-JUL-2004 (TREMBlrel. 27, Created)

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DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Rubisco large subunit (Fragment).
GN Name=rbcl;
OS Hypnea japonica.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gigartinales; Hypneaceae;
OC Hypnea.
OX NCBI_TaxID=105606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Yano T., Kamiya M., Arai S., Kawai H.;
RL Submitted (FEB-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL: AB104706; BAC82415.1; -: Genomic DNA.
DR GO: GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTANV 9

RESULT 41
ID Q8HB43_9FLOR PRELIMINARY; PRT; 9 AA.
AC Q8HB43;
DT 01-MAR-2003 (TREMBlrel. 23, Created)
DT 01-MAR-2003 (TREMBlrel. 23, Last sequence update)
DT 01-FEB-2005 (TREMBlrel. 29, Last annotation update)
DE Ribulose-1,5-bisphosphate large subunit (Fragment).
GN Name=rbcl;
OS Gracilaria perplexa.
OC Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gracilariaceae; Gracilariaceae;
OC Gracilaria.
OC NCBI_TaxID=197869;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Byrne K., Zuccarello G.C., West J.A., Liao M.-L., Kraft G.;
RT "Gracilaria species (Gracilariaceae, Rhodophyta) from southeastern
RT Australia, including a new species, G. perplexa sp. nov.: Morphology,
RT molecular relationships and agar content.";
RL Phycol. Res. 50:295-311(2002).
DR EMBL: AY131306; AAN07038.1; -: Genomic DNA.
DR EMBL: AY131307; AAN07040.1; -: Genomic DNA.
DR EMBL: AY131308; AAN07042.1; -: Genomic DNA.
DR GO: GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
DB 5 PTANV 9

RESULT 42
ID Q8HB44_9FLOR PRELIMINARY; PRT; 9 AA.
AC Q8HB44;
DT 01-MAR-2003 (TREMBlrel. 23, Created)
DT 01-MAR-2003 (TREMBlrel. 23, Last sequence update)
DT 01-FEB-2005 (TREMBlrel. 29, Last annotation update)

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DE Ribulose-1,5-bisphosphate large subunit (Fragment).
GN Name=rbcl;
OS Gracilaria cliftonii.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gracilariales; Gracilariaceae;
OC Gracilaria.
OX NCBI_taxid=206548;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Bryne K., Zuccarello G.C., West J.A., Liao M.-L., Kraft G.;
RT "Gracilaria species (Gracilariaceae, Rhodophyta) from southeastern
RT Australia, including a new species, G. perplexa sp. nov.: Morphology,
RT molecular relationships and agar content.";
RL Phycol. Res. 50:295-311(2002).
DR EMBL; AY131302; AAN07030.1; -; Genomic DNA.
DR EMBL; AY131303; AAN07032.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 5 PVHNV 9
Db 5 PTANV 9
RESULT 43
Q8HB45 GRACH PRELIMINARY; PRT; 9 AA.
AC Q8HB45;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-FEB-2005 (TRENBLrel. 29, Last annotation update)
DE Ribulose-1,5-bisphosphate large subunit (Ribulose-1,5-bisphosphate
DE carboxylase/oxygenase large subunit) (Fragment).
GN Name=rbcl;
OS Gracilaria chilensis (Red alga).
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gracilariales; Gracilariaceae;
OC Gracilaria.
OX NCBI_taxid=2775;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Bryne K., Zuccarello G.C., West J.A., Liao M.-L., Kraft G.;
RT "Gracilaria species (Gracilariaceae, Rhodophyta) from southeastern
RT Australia, including a new species, G. perplexa sp. nov.: Morphology,
RT molecular relationships and agar content.";
RL Phycol. Res. 50:295-311(2002).
DR EMBL; AY131299; AAN07024.1; -; Genomic DNA.
DR EMBL; AY131300; AAN07026.1; -; Genomic DNA.
DR EMBL; AY131301; AAN07028.1; -; Genomic DNA.
DR EMBL; AY423840; AAR84581.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 5 PVHNV 9

Db 5 PTANV 9
RESULT 44
Q8HRJ8 9FLOR PRELIMINARY; PRT; 9 AA.
AC Q8HRJ8;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TRENBLrel. 24, Last annotation update)
DE Ribulose-1,5-bisphosphate large subunit (Fragment).
GN Name=rbcl;
OS Ptilophora prolifera.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gelidiales; Gelidiaceae;
OC Ptilophora.
OX NCBI_taxid=143014;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Bryne K., Zuccarello G.C., West J.A., Liao M.-L., Kraft G.;
RT "Gracilaria species (Gracilariaceae, Rhodophyta) from southeastern
RT Australia, including a new species, G. perplexa sp. nov.: Morphology,
RT molecular relationships and agar content.";
RL Phycol. Res. 50:295-311(2002).
DR EMBL; AY131312; AAN07050.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 5 PVHNV 9
Db 5 PTANV 9
RESULT 45
Q8HRK0 9FLOR PRELIMINARY; PRT; 9 AA.
AC Q8HRK0;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DT 01-JUN-2003 (TRENBLrel. 24, Last annotation update)
DE Ribulose-1,5-bisphosphate large subunit (Fragment).
GN Name=rbcl;
OS Gracilaria secundata.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gracilariales; Gracilariaceae;
OC Gracilaria.
OX NCBI_taxid=172973;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Bryne K., Zuccarello G.C., West J.A., Liao M.-L., Kraft G.;
RT "Gracilaria species (Gracilariaceae, Rhodophyta) from southeastern
RT Australia, including a new species, G. perplexa sp. nov.: Morphology,
RT molecular relationships and agar content.";
RL Phycol. Res. 50:295-311(2002).
DR EMBL; AY131311; AAN07048.1; -; Genomic DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON_TER 1
SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 5 PVHNV 9

```

Db          5 PTANV 9

RESULT 46
QBHSLO_9FLOR
ID QBHSLO_9FLOR PRELIMINARY; PRT; 9 AA.
AC QBHSLO1
DT 01-MAR-2003 (TREMBlrel. 23, Created)
DT 01-MAR-2003 (TREMBlrel. 23, Last sequence update)
DE Ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit
DE (Fragment).
GN Name=rbcL;
OS Murrayella pericladus.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Ceramiales; Rhodomelaceae;
OC Murrayella.
OX NCBI_TaxID=110473;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Zuccarello G.C., Sandercock B., West J.A.;
RL Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF458764; AA014538.1; -; Genomic_DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 1 1
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
Db          5 PTANV 9

RESULT 47
QBHSLS_9FLOR
ID QBHSLS_9FLOR PRELIMINARY; PRT; 9 AA.
AC QBHSLS1
DT 01-MAR-2003 (TREMBlrel. 23, Created)
DT 01-MAR-2003 (TREMBlrel. 23, Last sequence update)
DE Ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit
DE (Fragment).
GN Name=rbcL;
OS Spyridia filamentosa.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Ceramiales; Ceramiaceae;
OC Spyridia.
OX NCBI_TaxID=196632;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Zuccarello G.C., Sandercock B., West J.A.;
RL Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF458738; AA014515.1; -; Genomic_DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 1 1
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
Db          5 PTANV 9

RESULT 48
QBMDU2_9FLOR
ID QBMDU2_9FLOR PRELIMINARY; PRT; 9 AA.
AC QBMDU21
DT 01-OCT-2002 (TREMBlrel. 22, Created)
DT 01-OCT-2002 (TREMBlrel. 22, Last sequence update)
DE Ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit
DE (Fragment).
GN Name=rbcL;
OS Hypnea sp.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Florideophyceae; Gigartinales; Hypneaceae;
OC Hypnea.
OX NCBI_TaxID=196372;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Zuccarello G.C., West J.A., Ruess J.;
RL "Phylogeography of the cosmopolitan red alga Caulacanthus ustulatus
(Rhodomelaceae, Gigartinales).";
RL Phycol. Res. 50:163-172(2002).
DR EMBL; AF453729; AA069942.1; -; Genomic_DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 1 1
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
Db          5 PTANV 9

RESULT 49
QBME56_9RHOD
ID QBME56_9RHOD PRELIMINARY; PRT; 9 AA.
AC QBME561
DT 01-OCT-2002 (TREMBlrel. 22, Created)
DT 01-OCT-2002 (TREMBlrel. 22, Last sequence update)
DE Ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit
DE (Fragment).
GN Name=rbcL;
OS Porphyra miniata.
OG Chloroplast.
OC Eukaryota; Rhodophyta; Bangiophyceae; Bangiales; Porphyra.
OX NCBI_TaxID=35147;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Teasdale B.W., West A., Taylor H., Klein A.S.;
RL Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF414600; AA03007.1; -; Genomic_DNA.
DR GO; GO:0009507; C:chloroplast; IEA.
KW Chloroplast.
FT NON TER
SQ SEQUENCE 1 1
Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.2e+06;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 5 PVHNV 9
Db          5 PTANV 9

RESULT 50
QBME58_9RHOD
ID QBME58_9RHOD PRELIMINARY; PRT; 9 AA.
AC QBME581
DT 01-OCT-2002 (TREMBlrel. 22, Created)
DT 01-OCT-2002 (TREMBlrel. 22, Last sequence update)

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DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit
 DE (Fragment).
 GN Name=rbcL;
 OS Porphyra linearis.
 OC Chloroplast.
 OC Eukaryota; Rhodophyta; Bangiophyceae; Bangiales; Bangiaceae; Porphyra.
 OX NCBI_TaxID=60544;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RA Teasdale B.W., West A., Taylor H., Klein A.S.;
 RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF414598; AAN03005.1; -; Genomic_DNA.
 DR GO; GO:0009507; C:chloroplast; IEA.
 KW Chloroplast.
 FT NON_TER
 SQ SEQUENCE 9 AA; 977 MW; CA1A4DC1B771AB02 CRC64;
 Query Match 30.6%; Score 15; DB 2; Length 9;
 Best Local Similarity 60.0%; Pred. No. 2.2e+06;
 Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 5 PVHNV 9
 Db 5 PTANV 9

Search completed: February 24, 2006, 10:18:15
 Job time : 247 secs

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GenCore version 5.1.7

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OM protein - protein search, using sw model

Run on: February 24, 2006, 10:14:46 ; Search time 38 Seconds
(without alignments)
22.788 Million cell updates/sec

Title: US-10-019-513-1

Perfect score: 49

Sequence: 1 STAPPVHV 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 791

Minimum DB seq length: 0

Maximum DB seq length: 9

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database :

PIR_80.*

1: pir1.*

2: pir2.*

3: pir3.*

4: pir4.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	18	36.7	8	B39745	endoglycosylcerami
2	18	36.7	9	B41983	orf downreg to b
3	17	34.7	5	B37988	acid proteinase li
4	17	34.7	9	PC7078	unidentified 18.7K
5	16	32.7	7	E61491	seed protein 18-5
6	16	32.7	8	PT0530	T-cell receptor be
7	16	32.7	8	PT0559	T-cell receptor be
8	16	32.7	8	S43971	tumor-associated a
9	15	30.6	8	S21288	lectin - potato (1
10	15	30.6	8	A31570	angiotensin-conver
11	15	30.6	9	B30572	T-cell receptor be
12	15	30.6	9	S55696	H2 class I protein
13	14	28.6	7	P00727	phosphoenolpyruvat
14	14	28.6	7	S71299	ICL2 protein - Par
15	14	28.6	7	S9027	carboxylesterase (
16	14	28.6	7	PT0283	Ig heavy chain CRD
17	14	28.6	7	A61081	tryptophyllin, bas
18	14	28.6	8	S16324	hypothetical prote
19	14	28.6	8	S10783	enamelin f - bovin
20	14	28.6	8	E47393	neuropeptide calla
21	14	28.6	9	S65433	bradykinin - horn
22	14	28.6	9	B38740	Ig kappa chain C r
23	14	28.6	9	S26508	collagen alpha 2(V
24	14	28.6	9	A43065	hydroxyproline-3-b
25	14	28.6	9	PC7073	ubiquinol-cytochro
26	14	28.6	9	B60246	ornithino-kinin - ch
27	14	28.6	9	A26744	bradykinin-like pe
28	14	28.6	9	A61057	Thr-6 bradykinin -
29	14	28.6	9	A60579	bradykinin-like pe

30	14	28.6	9	2	A61363	bradykinin - commo
31	14	28.6	9	2	A61358	bradykinin-like pe
32	14	28.6	9	4	S15595	orf 2 rara 5'-regi
33	13	26.5	6	2	A44916	mosquitocidal toxi
34	13	26.5	7	2	PT0654	T-cell receptor be
35	13	26.5	7	2	A15398	choline oxidase (E
36	12	24.5	7	4	A58725	virotaxin - destro
37	12	24.5	4	2	A37832	phenol 2-monooxyge
38	12	24.5	5	2	T10954	hypothetical prote
39	12	24.5	5	2	J50319	subesophageal gang
40	12	24.5	6	2	I51317	bHLH transcription
41	12	24.5	6	2	PT0280	Ig heavy chain CRD
42	12	24.5	7	2	PC1316	large granule L3 c
43	12	24.5	7	2	PT0246	Ig heavy chain CRD
44	12	24.5	9	2	S66419	tetrameric protein
45	12	24.5	9	2	S13889	phosphoenolpyruvat
46	12	24.5	9	2	S70332	endosperm protein,
47	12	24.5	9	2	PT0247	Ig heavy chain CRD
48	12	24.5	9	2	PL0139	carbon-monoxide de
49	12	24.5	9	2	S10920	venom protein HR-3
50	11	22.4	9	2	A56029	N-methylpurine DNA
51	11	22.4	4	2	A02147	phagocytosis-stimu
52	11	22.4	4	2	A34626	RPC4-related neuro
53	11	22.4	4	2	S17255	ribosomal protein
54	11	22.4	5	2	JN0862	peptidyl-dipeptida
55	11	22.4	5	2	B60274	major protein anti
56	11	22.4	5	2	E60274	major protein anti
57	11	22.4	5	2	PQ0009	angiotensin-conver
58	11	22.4	5	2	P80324	ribulose-bisphosph
59	11	22.4	5	2	S11127	phosphoprotein, bo
60	11	22.4	5	2	E42364	flagellar protein
61	11	22.4	5	2	G37196	bradykinin-potenti
62	11	22.4	6	2	A43766	28K ubiquitin-immu
63	11	22.4	6	2	B60110	repetitive protein
64	11	22.4	6	2	B27656	contraction-inhibi
65	11	22.4	6	4	S15596	orf 3 rara 5'-regi
66	11	22.4	7	2	I50210	gene c-rel protein
67	11	22.4	7	2	E48394	glycoprotein compo
68	11	22.4	7	2	A39690	neural cell adhesi
69	11	22.4	8	2	C39690	neural cell adhesi
70	11	22.4	8	2	S33008	citrate synthase -
71	11	22.4	8	2	A39308	glycine reductase
72	11	22.4	8	2	PQ0701	unidentified 6.5/3
73	11	22.4	8	2	A42689	major postsynaptic
74	11	22.4	9	2	S59902	glutathione transf
75	11	22.4	9	2	A61364	isotocin - common
76	11	22.4	9	2	S35538	ribosomal protein
77	11	22.4	9	2	S63491	dissimilatory sulf
78	11	22.4	9	2	C41170	photosystem II pro
79	11	22.4	9	2	S39766	cardioactive pepti
80	11	22.4	9	2	PT0268	Ig heavy chain CRD
81	11	22.4	9	2	PC2197	zymogen granule me
82	11	22.4	9	2	D48186	ATPase R1 subunit
83	11	22.4	9	2	A12872	transaldolase (EC
84	11	22.4	9	2	E11497	transaldolase (EC
85	11	22.4	9	2	A11978	calliWRamide 5 -
86	11	22.4	9	2	A60356	118K stomach cance
87	11	22.4	9	2	S66636	alpha-2-macroglobu
88	11	22.4	9	2	P00443	3-oxoacid CoA-tran
89	11	22.4	9	2	P00027	pev-tachykinin - p
90	11	22.4	9	4	S15594	orf 1 rara 5'-regi
91	10	20.4	5	2	A41295	copper resistance
92	10	20.4	5	2	S11075	alcohol dehydrogen
93	10	20.4	5	2	PT0714	T-cell receptor be
94	10	20.4	6	2	A61049	halo-toxin - Pseud
95	10	20.4	6	2	PQ0008	angiotensin-conver
96	10	20.4	6	2	PT0618	T-cell receptor be
97	10	20.4	6	2	PT0715	T-cell receptor be
98	10	20.4	7	2	PQ0663	membrane protein -
99	10	20.4	7	2	I40504	hypothetical prote
100	10	20.4	7	2	PN0150	omega-gliadin 1'
101	10	20.4	7	2	A34026	acetylcholinestera
102	10	20.4	7	2	S42620	aggrekan - bovine

103	10	20.4	7	2	PH0932	T-cell receptor be	176	9	18.4	9	2	PT0285	Ig heavy chain CRD
104	10	20.4	7	2	PH0029	pev-kinin i - pena	177	9	18.4	9	2	S78420	ribosomal protein
105	10	20.4	7	2	ECMUCR	alpha-myosin heavy	178	9	18.4	9	2	PH0943	T-cell receptor be
106	10	20.4	7	2	ECMUCR	catch-relaxing pep	179	9	18.4	9	2	PH0937	T-cell receptor be
107	10	20.4	8	2	PT0368	Ig gamma chain C r	180	9	18.4	9	2	S39767	cardiacactive pepi
108	10	20.4	8	2	I57532	gene Thislow prote	181	9	18.4	9	2	S56004	glucan 1,3-beta-gl
109	10	20.4	8	2	A61328	trypsin (EC 3.4.21	182	9	18.4	9	2	S39040	lysine-conopressin
110	10	20.4	8	2	S43972	tumor-associated a	183	9	18.4	9	2	A31576	xylose isomerase (
111	10	20.4	9	2	S13636	coat protein beta	184	9	18.4	9	2	A26363	cardiacactive pepi
112	10	20.4	9	2	S36898	ribosomal protein	185	9	18.4	9	2	S27233	cardiacactive pepi
113	10	20.4	9	2	A53797	3',5'-cyclic-GMP p	186	9	18.4	9	2	S06375	arginine vasotocin
114	10	20.4	9	2	PT0326	Ig heavy chain CRD	187	9	18.4	9	2	B61364	vasotocin - common
115	10	20.4	9	2	B46250	alpha-adaptin - bo	188	9	18.4	9	2	JQ0914	MHC class I histoc
116	10	20.4	9	2	PH0902	T-cell receptor be	189	9	18.4	9	2	I46016	cytokeratin 4 - bo
117	10	20.4	9	2	G58502	kidney and bladder	190	8	16.3	3	3	GRHU	growth-modulating
118	10	20.4	9	2	JF0073	ribosomal protein	191	8	16.3	3	3	RHPGT	thyroliberin - pig
119	10	20.4	9	2	PC2021	oxytocin-related p	192	8	16.3	3	3	A60898	burstin - chicken
120	10	20.4	9	2	I54379	gene NF2 protein -	193	8	16.3	3	3	RHSHT	thyroliberin - she
121	10	20.4	9	2	JQ1202	leader peptide - p	194	8	16.3	3	3	A92971	thyroliberin - ees
122	9	18.4	3	3	I50412	gene p20K protein	195	8	16.3	3	3	RHTD70	thyroliberin - Bom
123	9	18.4	4	2	PT0675	T-cell receptor be	196	8	16.3	4	2	A48360	gamma subunit of P
124	9	18.4	5	2	S51077	alpha-amylase - ri	197	8	16.3	4	2	I38888	COI intron 16 prot
125	9	18.4	5	2	PT0659	T-cell receptor be	198	8	16.3	4	2	PL0140	carbon-monoxide de
126	9	18.4	5	2	I40698	biotin B - Citroba	199	8	16.3	4	2	PT0712	T-cell receptor be
127	9	18.4	5	2	PT0686	T-cell receptor be	200	8	16.3	4	2	A32039	tyrosine-melanocyt
128	9	18.4	5	2	PT0669	T-cell receptor be	201	8	16.3	5	2	JN0860	peptidyl-dipeptida
129	9	18.4	5	4	A58728	serrawettin W2 - S	202	8	16.3	5	2	C41225	copper resistance
130	9	18.4	6	2	S14159	parasporal crystal	203	8	16.3	5	2	S70154	URF2 protein - Xan
131	9	18.4	6	2	S78764	ribosomal protein	204	8	16.3	5	2	JT0520	Ig kappa chain V-I
132	9	18.4	6	2	A19780	transferrin - bovi	205	8	16.3	5	2	A60521	glycogen phosphory
133	9	18.4	6	2	I49808	DC-SP2.5 region - m	206	8	16.3	6	2	JN0861	peptidyl-dipeptida
134	9	18.4	6	2	A46474	PC epsilon R11b -	207	8	16.3	6	2	A61419	sarcosine dehydrog
135	9	18.4	6	2	PT0531	T-cell receptor be	208	8	16.3	6	2	B56979	collagen alpha 1(I
136	9	18.4	6	2	PT0643	T-cell receptor be	209	8	16.3	6	2	PT0693	T-cell receptor be
137	9	18.4	6	2	I49421	laminin B1 - waste	210	8	16.3	6	2	PT0709	beta-crystallin B2
138	9	18.4	7	1	NVPG7	hypothalamic hepta	211	8	16.3	6	2	S71349	contraction-inhibi
139	9	18.4	7	2	PT0515	T-cell receptor be	212	8	16.3	6	2	A27696	hypothetical colla
140	9	18.4	7	2	PT0520	T-cell receptor be	213	8	16.3	6	4	A35039	peptidyl-dipeptida
141	9	18.4	7	2	PT0623	T-cell receptor be	214	8	16.3	7	2	JN0859	gramicidin S synth
142	9	18.4	7	4	I56695	hypothetical L2 pr	215	8	16.3	7	2	S42407	phosphonoacetaldeh
143	9	18.4	8	1	LFSAME	probable msrA lead	216	8	16.3	7	2	A28709	ribulose-bisphosph
144	9	18.4	8	2	A33995	adipokinetic hormo	217	8	16.3	7	2	PT0087	dihydrofolate redu
145	9	18.4	8	2	B44960	neuropeptide Led-C	218	8	16.3	7	2	I48105	DNA topoisomerase
146	9	18.4	8	2	S11545	adipokinetic hormo	219	8	16.3	7	2	I48086	Ig mu chain D regi
147	9	18.4	8	2	S08996	hypertrehalosemic	220	8	16.3	7	2	E33932	glutathione S-tran
148	9	18.4	8	2	B49823	adipokinetic hormo	221	8	16.3	7	2	S66442	amine oxidase (cop
149	9	18.4	8	2	A38004	adipokinetic hormo	222	8	16.3	7	2	A38081	carnocin UI49 - Ca
150	9	18.4	8	2	T14906	hypothetical prote	223	8	16.3	7	2	A58718	polyposphate-gluc
151	9	18.4	8	2	PT0639	T-cell receptor be	224	8	16.3	7	2	S29735	myomodulin - Calif
152	9	18.4	8	2	B54823	olfactory receptor	225	8	16.3	7	2	A28340	hypothetical prote
153	9	18.4	8	2	A61597	cytochrome P450 AL	226	8	16.3	8	2	S08606	neuropeptide Led-C
154	9	18.4	8	2	S65647	2-hydroxyglutaryl-	227	8	16.3	8	2	A44960	red pigment-concen
155	9	18.4	8	2	S21273	cellulase (EC 3.2.	228	8	16.3	8	2	A61348	hypertrrehalosemic
156	9	18.4	8	2	A46306	spasmogenic toxin	229	8	16.3	8	2	S08995	adipokinetic hormo
157	9	18.4	8	2	J50316	leucokinin VI - Ma	230	8	16.3	8	2	A49823	adipokinetic hormo
158	9	18.4	8	2	A23967	leucopyrokinin - M	231	8	16.3	8	2	S15422	hypertrehalosemic
159	9	18.4	8	2	S66646	cardioacceleratory	232	8	16.3	8	2	A43976	hypertrehalosemic
160	9	18.4	8	2	I49404	prealbumin - waste	233	8	16.3	8	2	B43976	adipokinetic hormo
161	9	18.4	8	2	A59028	MHC class I histoc	234	8	16.3	8	2	A58641	adipokinetic hormo
162	9	18.4	8	2	XGHUEU	urine glycopeptide	235	8	16.3	8	2	S68802	nitrate reductase
163	9	18.4	9	2	A93408	oxytocin - Austral	236	8	16.3	8	2	G33098	205K exoantigen -
164	9	18.4	9	2	A92774	oxytocin - spotted	237	8	16.3	8	2	PT0311	Ig heavy chain CRD
165	9	18.4	9	2	A93147	oxytocin - finback	238	8	16.3	8	2	B45800	serum albumin - do
166	9	18.4	9	2	A91466	oxytocin - hippopo	239	8	16.3	8	2	PH1618	Ig H chain V-D-J r
167	9	18.4	9	2	B90667	oxytocin - rabbit	240	8	16.3	8	2	PT0691	T-cell receptor be
168	9	18.4	9	2	A28495	conopressin G - co	241	8	16.3	8	2	A05169	neuropeptide M-I -
169	9	18.4	9	2	B28495	conopressin S - co	242	8	16.3	8	2	S21663	neuropeptide - flo
170	9	18.4	9	2	A61102	parathyroid hormon	243	8	16.3	8	2	I48934	apolipoprotein A-I
171	9	18.4	9	2	A60108	exotoxin A - Strep	244	8	16.3	8	2	A54823	olfactory receptor
172	9	18.4	9	2	A61230	calsequestrin, car	245	8	16.3	8	2	I57018	gene ctftr protein
173	9	18.4	9	2	B33098	231K exoantigen -	246	8	16.3	8	2	S65381	cytochrome-c oxida
174	9	18.4	9	2	PT0231	Ig heavy chain CDR	247	8	16.3	8	2	A35180	neutral proteinase
175	9	18.4	9	2	PT0238	Ig heavy chain CRD	248	8	16.3	8	2	S69165	ferredoxin a2 - Ja

249	8	16.3	8	2	A25836	L-serine ammonia-1	322	7	14.3	8	2	A58620	adipokinetic hormo
250	8	16.3	8	4	I54017	granulocyte-colony	323	7	14.3	8	2	S55310	adipokinetic hormo
251	8	16.3	8	2	S07205	litorin 2-Glu - Au	324	7	14.3	8	2	S10596	adipokinetic hormo
252	8	16.3	9	2	S07204	litorin I - Austr	325	7	14.3	8	2	PH1407	Ig heavy chain V r
253	8	16.3	9	2	S07241	litorin - Rohde's	326	7	14.3	8	2	PL0184	capaid protein VP
254	8	16.3	9	2	E28854	fibrinopeptide B -	327	7	14.3	8	2	S70727	ipgr protein - Shi
255	8	16.3	9	2	JS0302	xenopsin-related p	328	7	14.3	8	2	S22428	chitin-binding pro
256	8	16.3	9	2	A03020	xenopsin-related p	329	7	14.3	8	2	A39892	P element, P cytot
257	8	16.3	9	2	S66608	quinoline 2-oxid	330	7	14.3	8	2	PT0627	T-cell receptor be
258	8	16.3	9	2	T31612	hypothetical prote	331	7	14.3	8	2	PT0509	T-cell receptor be
259	8	16.3	9	2	PT0272	Ig heavy chain CRD	332	7	14.3	8	2	PT0547	T-cell receptor be
260	8	16.3	9	2	S65913	pyrimidine synthes	333	7	14.3	8	2	PT0716	T-cell receptor be
261	8	16.3	9	2	PH1591	Ig H chain V-D-J r	334	7	14.3	8	2	S29272	tocopherol-binding
262	8	16.3	9	2	A42266	peptidylglycine mo	335	7	14.3	8	2	S19288	acylase - Kluvyvera
263	8	16.3	9	2	D57444	neuropeptide Grb-A	336	7	14.3	8	2	PT0030	inulinase (EC 3.2.
264	8	16.3	9	2	A29477	diuretic neuropept	337	7	14.3	8	2	C61512	variant surface gl
265	8	16.3	9	2	C41978	calliFMRamide 3 -	338	7	14.3	8	2	JS0317	leucokinin VII - M
266	8	16.3	9	2	PT0080	60K Ca binding pro	339	7	14.3	8	2	D47393	neuropeptide calla
267	8	16.3	9	2	I49406	bone gla protein -	340	7	14.3	8	2	S71919	alcohol dehydrogen
268	8	16.3	9	2	S99437	D-amino-acid oxida	341	7	14.3	8	2	A41117	acetylcholinestera
269	8	16.3	9	2	S99026	sperm-activating p	342	7	14.3	8	2	A14683	aspartate transami
270	8	16.3	9	2	JN0026	probable minipolyp	343	7	14.3	8	2	A28719	thymic humoral fac
271	8	16.3	9	4	I57650	hemoglobin alpha c	344	7	14.3	8	2	I48935	apolipoprotein A-I
272	7	14.3	3	3	A43391	TRH-like tripeptid	345	7	14.3	8	2	I48432	Ca2+-transporting
273	7	14.3	3	3	I78890	tyrosine protein k	346	7	14.3	8	2	B47479	neuropeptide B - b
274	7	14.3	3	3	A33802	thyrotropin-releas	347	7	14.3	9	2	D45796	dihydrolipoamide S
275	7	14.3	4	2	S63508	starvation-induced	348	7	14.3	9	2	D58503	translation elonga
276	7	14.3	4	2	I51049	metallothionein-A	349	7	14.3	9	2	S66607	quinoline 2-oxid
277	7	14.3	4	2	PT0240	Ig heavy chain CRD	350	7	14.3	9	2	S01123	photosystem II 3.2
278	7	14.3	4	2	I54357	schwannomin - mous	351	7	14.3	9	2	S70345	amine oxidase (cop
279	7	14.3	4	2	A35779	neuropeptide Antho	352	7	14.3	9	2	PT0288	Ig heavy chain CRD
280	7	14.3	5	1	H0ROHA	proctolin - Americ	353	7	14.3	9	2	PT0324	Ig heavy chain CRD
281	7	14.3	5	2	B22565	R-phycocerythrin al	354	7	14.3	9	2	B49712	ATP-binding protei
282	7	14.3	5	2	A37114	hypoxanthine phosp	355	7	14.3	9	2	C60070	gastrin - domestic
283	7	14.3	5	2	S63595	hypothetical prote	356	7	14.3	9	2	G56978	collagen alpha 1(I
284	7	14.3	5	2	PT0267	Ig heavy chain CRD	357	7	14.3	9	2	I58350	gene c-mpl protein
285	7	14.3	5	2	PT0596	T-cell receptor be	358	7	14.3	9	2	S02384	probable membrane
286	7	14.3	5	2	H44817	34.5K structural p	359	7	14.3	9	2	A61620	locustamytotropin I
287	7	14.3	5	2	F44817	34.5K structural p	360	7	14.3	9	2	A41978	calliFMRamide 1 -
288	7	14.3	5	2	B44817	34.5K structural p	361	7	14.3	9	2	A44787	calliFMRamide 10
289	7	14.3	5	2	D44817	35K structural pro	362	7	14.3	9	2	B41978	calliFMRamide 2 -
290	7	14.3	5	2	A60411	proctolin - Atlant	363	7	14.3	9	2	D41978	calliFMRamide 4 -
291	7	14.3	6	2	A35890	RNA-directed DNA p	364	7	14.3	9	2	B20569	serum amyloid P-co
292	7	14.3	6	2	S11556	hydrogensulfite re	365	7	14.3	9	2	S77984	cytochrome-c oxida
293	7	14.3	6	2	A37765	hypothetical prote	366	7	14.3	9	2	B39504	ocamer-binding pr
294	7	14.3	6	2	A61140	sperm acrosomal pr	367	7	14.3	9	2	S66635	alpha-2-macroglobu
295	7	14.3	6	2	I67345	MHC H2-K-k cell su	368	7	14.3	9	2	S10784	enamelin 1 - bovin
296	7	14.3	6	2	I65546	MHC H2-L antigen -	369	7	14.3	9	2	I46023	growth hormone rec
297	7	14.3	6	2	PT0518	T-cell receptor be	370	7	14.3	9	2	S78762	ribosomal protein
298	7	14.3	6	2	PT0616	T-cell receptor be	371	7	14.3	9	2	A28924	fructose-bisphosph
299	7	14.3	6	2	PT0650	T-cell receptor be	372	7	14.3	9	2	PC7074	translation elonga
300	7	14.3	6	2	PT0550	T-cell receptor be	373	7	14.3	9	2	S19329	sperm-activating p
301	7	14.3	6	2	I49424	cytotoxic T-lympho	374	7	14.3	9	2	S15850	vitamin D3 26-mono
302	7	14.3	7	1	A61324	dermorphin - Rohde	375	6	12.2	3	3	A60522	sperm-activating p
303	7	14.3	7	2	S36662	dermorphin (lys-7)	376	6	12.2	3	3	PT0636	T-cell receptor be
304	7	14.3	7	2	S21230	dermorphin (Trp-4,	377	6	12.2	4	2	A41890	protein D - Becher
305	7	14.3	7	2	PH1408	Ig heavy chain V r	378	6	12.2	4	2	S43014	hypothetical prote
306	7	14.3	7	2	A44428	platelet aggregati	379	6	12.2	4	2	A40135	branched-chain-ami
307	7	14.3	7	2	S78024	ribosomal protein	380	6	12.2	4	2	I40697	biotin A - Citroba
308	7	14.3	7	2	A33098	244K exoantigen -	381	6	12.2	5	2	B18136	20K protein - Rick
309	7	14.3	7	2	C56793	platelet glycoprot	382	6	12.2	5	2	JH0253	gut pentapeptide -
310	7	14.3	7	2	B39040	calsequestrin, fas	383	6	12.2	5	2	PT0281	Ig heavy chain CRD
311	7	14.3	7	2	PT0524	T-cell receptor be	384	6	12.2	5	2	PT0295	Ig heavy chain CRD
312	7	14.3	7	2	PT0526	T-cell receptor be	385	6	12.2	5	2	S62883	seminal plasma pro
313	7	14.3	7	2	PT0521	T-cell receptor be	386	6	12.2	5	2	PT0651	T-cell receptor be
314	7	14.3	7	2	PT0683	T-cell receptor be	387	6	12.2	5	2	PT0695	T-cell receptor be
315	7	14.3	7	2	FX0008	glucuronosyltransf	388	6	12.2	5	2	G44817	27.5 kda structura
316	7	14.3	7	2	S58797	serine/threonine-s	389	6	12.2	5	2	I44817	27.5K structural p
317	7	14.3	7	2	B48394	major fat-globule	390	6	12.2	5	2	E44817	27.5K structural p
318	7	14.3	7	2	S45648	Na+-transporting A	391	6	12.2	5	2	C44817	28.5K structural p
319	7	14.3	7	2	PN0649	pullulanase (EC 3.	392	6	12.2	5	2	A44817	28K structural pro
320	7	14.3	7	2	B44787	calliFMRamide 11	393	6	12.2	5	2	A32014	tram protein - Esc
321	7	14.3	7	4	S15597	orf 4 rara 5'-regi	394	6	12.2	5	2	A44692	fulicin - giant Af

395	6	12.2	5	2	PT0585	T-cell receptor be	468	5	10.2	5	2	I39966	ribosomal protein
396	6	12.2	6	2	JU0355	lipopeptide WS1279	469	5	10.2	5	2	I39965	ribosomal protein
397	6	12.2	6	2	S29637	jacalin beta-II ch	470	5	10.2	5	2	S70615	endo-1,4-beta-xyla
398	6	12.2	6	2	B61512	variant surface gl	471	5	10.2	5	2	S70615	R-phycoerythrin ga
399	6	12.2	6	2	A31263	dihydrofolate redu	472	5	10.2	5	2	T14908	hypothetical prote
400	6	12.2	6	2	B31263	dihydrofolate redu	473	5	10.2	5	2	I50385	myosin light chain
401	6	12.2	6	2	PT0532	T-cell receptor be	474	5	10.2	5	2	PT0308	ig heavy chain CRD
402	6	12.2	6	2	PT0587	T-cell receptor be	475	5	10.2	5	2	C53284	T-cell receptor be
403	6	12.2	6	2	PT0593	T-cell receptor be	476	5	10.2	5	2	PT0610	T-cell receptor be
404	6	12.2	6	2	S60293	tubulin beta-3 cha	477	5	10.2	5	2	PT0525	T-cell receptor be
405	6	12.2	6	2	PC4127	hypothetical 6 pro	478	5	10.2	5	2	PT0597	T-cell receptor be
406	6	12.2	6	2	PT0605	T-cell receptor be	479	5	10.2	5	2	PT0729	T-cell receptor be
407	6	12.2	6	2	A43129	neuropeptide GNFR	480	5	10.2	5	2	PT0624	T-cell receptor be
408	6	12.2	7	1	XEYDGD	galactose oxidase	481	5	10.2	5	2	PT0625	T-cell receptor be
409	6	12.2	7	2	S71867	glutathione transf	482	5	10.2	5	2	PT0672	T-cell receptor be
410	6	12.2	7	2	S16364	opacity protein P.	483	5	10.2	5	2	PT0660	T-cell receptor be
411	6	12.2	7	2	S16365	opacity protein P.	484	5	10.2	5	2	PT0656	T-cell receptor be
412	6	12.2	7	2	B34818	vicilin 57K chain	485	5	10.2	5	2	PT0535	T-cell receptor be
413	6	12.2	7	2	H33098	180K exoantigen -	486	5	10.2	5	2	PT0699	T-cell receptor be
414	6	12.2	7	2	PC2370	probable H+-transp	487	5	10.2	5	2	PT0553	T-cell receptor be
415	6	12.2	7	2	S45311	microcin C7 - Esch	488	5	10.2	5	2	PT0561	T-cell receptor be
416	6	12.2	7	2	S16364	glucose isomerase	489	5	10.2	5	2	PT0690	T-cell receptor be
417	6	12.2	8	2	S59622	metallothionein is	490	5	10.2	5	2	PT0684	T-cell receptor be
418	6	12.2	8	2	PA0035	protein QA300039 -	491	5	10.2	5	2	PT0590	T-cell receptor be
419	6	12.2	8	2	S78036	ribosomal protein	492	5	10.2	5	2	PT0577	T-cell receptor be
420	6	12.2	8	2	S13661	polygalacturonase	493	5	10.2	5	2	PT0580	T-cell receptor be
421	6	12.2	8	2	A42057	fibroblast growth	494	5	10.2	5	2	PT0700	T-cell receptor be
422	6	12.2	8	2	PT0588	T-cell receptor be	495	5	10.2	5	2	PT0713	T-cell receptor be
423	6	12.2	8	2	PH0934	T-cell receptor be	496	5	10.2	5	2	S69237	surface protein te
424	6	12.2	8	2	A37521	R-phycoerythrin ga	497	5	10.2	5	2	PT0644	T-cell receptor be
425	6	12.2	8	2	B27867	homeotic protein U	498	5	10.2	5	2	PT0600	T-cell receptor be
426	6	12.2	8	2	H41978	calliFERamide 8 -	499	5	10.2	5	2	PT0601	T-cell receptor be
427	6	12.2	8	2	A61467	penalbumin - Adeli	500	5	10.2	5	2	PT0585	T-cell receptor be
428	6	12.2	8	2	T48890	hypothetical prote	501	5	10.2	5	2	PT0701	T-cell receptor be
429	6	12.2	8	2	E60588	sperm-activating p	502	5	10.2	5	2	PT0717	T-cell receptor be
430	6	12.2	9	1	YFPG	thymic factor - pi	503	5	10.2	5	3	JT0870	phytoaulfokine alp
431	6	12.2	9	1	AKLQIM	locustamyoinhibiti	504	5	10.2	5	2	S66195	alcohol dehydrogen
432	6	12.2	9	2	A60957	thymocyte growth p	505	5	10.2	5	2	S02617	alcohol dehydrogen
433	6	12.2	9	2	A24244	adipokinetic hormo	506	5	10.2	5	2	B34835	dnaA protein - Pse
434	6	12.2	9	2	D24180	fibronogen beta ch	507	5	10.2	5	2	JH0784	neuropeptide TE-6
435	6	12.2	9	2	C24180	fibronogen beta ch	508	5	10.2	5	2	B26206	alpha-1,4-glucan-p
436	6	12.2	9	2	F28854	fibriropeptide B -	509	5	10.2	5	2	I59142	platelet-derived g
437	6	12.2	9	2	D28854	fibriropeptide B -	510	5	10.2	5	2	PT0510	T-cell receptor be
438	6	12.2	9	2	S70334	endospERM protein,	511	5	10.2	5	2	PT0519	T-cell receptor be
439	6	12.2	9	2	PT0270	ig heavy chain CRD	512	5	10.2	5	2	PT0512	T-cell receptor be
440	6	12.2	9	2	PT0299	ig heavy chain CRD	513	5	10.2	5	2	PT0599	T-cell receptor be
441	6	12.2	9	2	PT0670	T-cell receptor be	514	5	10.2	5	2	PT0630	T-cell receptor be
442	6	12.2	9	2	PT0562	T-cell receptor be	515	5	10.2	5	2	PT0637	T-cell receptor be
443	6	12.2	9	2	I52974	seminal vesicle pr	516	5	10.2	5	2	PT0621	T-cell receptor be
444	6	12.2	9	2	PH0917	T-cell receptor be	517	5	10.2	5	2	PT0619	T-cell receptor be
445	6	12.2	9	2	PH0921	T-cell receptor be	518	5	10.2	5	2	PT0641	T-cell receptor be
446	6	12.2	9	2	S78426	52.5K protein - sp	519	5	10.2	5	2	PT0657	T-cell receptor be
447	6	12.2	9	2	S19523	orf AB protein - S	520	5	10.2	5	2	PT0662	T-cell receptor be
448	6	12.2	9	2	A57444	neuropeptide Grb-A	521	5	10.2	5	2	PT0668	T-cell receptor be
449	6	12.2	9	2	B57444	neuropeptide Grb-A	522	5	10.2	5	2	PT0648	T-cell receptor be
450	6	12.2	9	2	A54199	L-lysophorin - Ja	523	5	10.2	5	2	PT0533	T-cell receptor be
451	6	12.2	9	2	PC7076	spectrin alpha cha	524	5	10.2	5	2	PT0720	T-cell receptor be
452	6	12.2	9	2	G85802	hypothetical prote	525	5	10.2	5	2	PT0560	T-cell receptor be
453	6	12.2	9	4	I73804	hypothetical E2 pr	526	5	10.2	5	2	PT0723	T-cell receptor be
454	5	10.2	3	3	PT0622	T-cell receptor be	527	5	10.2	5	2	PT0718	T-cell receptor be
455	5	10.2	3	3	T13892	cytochrome-c oxida	528	5	10.2	5	2	PT0589	T-cell receptor be
456	5	10.2	4	2	B43848	cell surface adhes	529	5	10.2	5	2	PT0730	T-cell receptor be
457	5	10.2	4	2	T30569	hypothetical prote	530	5	10.2	5	2	PD0028	pev-kinin 2 - pena
458	5	10.2	4	2	I57745	D-mannosate hydrol	531	5	10.2	5	2	S29881	Na+/K+-exchanging
459	5	10.2	4	2	PT0696	T-cell receptor be	532	5	10.2	5	2	A61068	locustakinin - mig
460	5	10.2	4	2	PT0645	T-cell receptor be	533	5	10.2	5	2	S19630	ribosomal protein
461	5	10.2	4	2	PT0661	T-cell receptor be	534	5	10.2	5	2	S20446	elastase - Pseudom
462	5	10.2	4	2	PT0534	T-cell receptor be	535	5	10.2	5	2	S25266	piIg protein - Bac
463	5	10.2	4	2	PT0698	T-cell receptor be	536	5	10.2	5	2	PT0289	ig heavy chain CRD
464	5	10.2	4	2	PT0551	T-cell receptor be	537	5	10.2	5	2	E30608	ig kappa chain V-I
465	5	10.2	4	2	PT0697	T-cell receptor be	538	5	10.2	5	2	B33541	hypothetical prote
466	5	10.2	4	2	PT0566	T-cell receptor be	539	5	10.2	5	2	PH1602	ig H chain V-D-J r
467	5	10.2	5	2	I39964	ribosomal protein	540	5	10.2	5	2	PT0611	T-cell receptor be

541	5	10.2	7	2	PT0523	T-cell receptor be	614	4	8.2	4	2	137013	protamine P1 - Cer
542	5	10.2	7	2	PT0628	T-cell receptor be	615	4	8.2	4	2	I84439	protamine P1 - sav
543	5	10.2	7	2	PT0642	T-cell receptor be	616	4	8.2	4	2	PL0146	carbon-monoxide de
544	5	10.2	7	2	PT0620	T-cell receptor be	617	4	8.2	4	2	JQ1273	neuropeptide Antho
545	5	10.2	7	2	PT0667	T-cell receptor be	618	4	8.2	4	2	A32480	achatin-I - giant
546	5	10.2	7	2	PT0663	T-cell receptor be	619	4	8.2	4	2	A32480	Ig heavy chain CRD
547	5	10.2	7	2	PT0704	T-cell receptor be	620	4	8.2	4	2	PT0271	T-cell receptor be
548	5	10.2	7	2	PT0689	T-cell receptor be	621	4	8.2	4	2	PT0633	T-cell receptor be
549	5	10.2	7	2	PT0719	T-cell receptor be	622	4	8.2	4	2	PT0677	T-cell receptor be
550	5	10.2	7	2	PT0586	T-cell receptor be	623	4	8.2	4	2	PT0706	T-cell receptor be
551	5	10.2	7	2	PT0569	T-cell receptor be	624	4	8.2	4	2	PT0721	T-cell receptor be
552	5	10.2	7	2	PT0576	T-cell receptor be	625	4	8.2	4	2	B41225	copper resistance
553	5	10.2	7	2	PT0579	T-cell receptor be	626	4	8.2	4	2	I40702	primase - Citrobac
554	5	10.2	7	2	PT0581	T-cell receptor be	627	4	8.2	4	2	B37325	pap fibrial regul
555	5	10.2	7	2	PT0702	T-cell receptor be	628	4	8.2	4	2	D60274	major protein anti
556	5	10.2	7	2	PQ0777	NADH2 dehydrogenas	629	4	8.2	4	2	T14910	hypothetical prote
557	5	10.2	7	2	S03066	globulin IV alpha	630	4	8.2	4	2	S55237	zinc-binding prote
558	5	10.2	7	2	B35890	RNA-directed DNA p	631	4	8.2	4	2	A60803	neuropeptide - sea
559	5	10.2	7	2	A30812	sex pheromone cCF1	632	4	8.2	4	2	B61168	cocoonase (EC 3.4
560	5	10.2	7	2	PC2132	FMRFamide-related	633	4	8.2	4	2	PT0278	Ig heavy chain CRD
561	5	10.2	7	2	S33244	neuromodulatory pe	634	4	8.2	4	2	B44823	synaptosomal-assoc
562	5	10.2	7	2	S33245	neuromodulatory pe	635	4	8.2	4	2	D44823	synaptosomal-assoc
563	5	10.2	7	2	S33246	neuromodulatory pe	636	4	8.2	4	2	PT0513	T-cell receptor be
564	5	10.2	7	2	PT0529	T-cell receptor be	637	4	8.2	4	2	PT0703	T-cell receptor be
565	5	10.2	7	2	PT0544	T-cell receptor be	638	4	8.2	4	2	PT0707	T-cell receptor be
566	5	10.2	7	4	I55382	hypothetical pepti	639	4	8.2	4	2	PT0573	T-cell receptor be
567	5	10.2	8	2	A32523	peptidyl-dipectida	640	4	8.2	4	2	PT0572	T-cell receptor be
568	5	10.2	8	2	S63493	disimilatory sulf	641	4	8.2	4	2	PT0679	T-cell receptor be
569	5	10.2	8	2	PA0032	protein QA30040 -	642	4	8.2	4	2	S68326	blood cell protein
570	5	10.2	8	2	TU952	hypothetical prote	643	4	8.2	4	2	I40469	dnax2-like protein
571	5	10.2	8	2	PT0279	Ig heavy chain CRD	644	4	8.2	4	2	PT0608	T-cell receptor be
572	5	10.2	8	2	PH0803	T-cell receptor al	645	4	8.2	4	2	PT0538	T-cell receptor be
573	5	10.2	8	2	PT0595	T-cell receptor be	646	4	8.2	4	2	PT0540	T-cell receptor be
574	5	10.2	8	2	PT0522	T-cell receptor be	647	4	8.2	4	2	C3751	spinal cord peptid
575	5	10.2	8	2	PT0631	T-cell receptor be	648	4	8.2	4	2	A28830	mitosis inhibiting
576	5	10.2	8	2	PT0613	T-cell receptor be	649	4	8.2	4	2	A60986	N-formyl oligopept
577	5	10.2	8	2	A38887	T-cell receptor ga	650	4	8.2	4	2	T11779	phosphoglycerate t
578	5	10.2	8	2	B47594	aspartate kinase (651	4	8.2	4	2	S11024	hydrogensulfate re
579	5	10.2	8	2	A61496	ubiquitin - celery	652	4	8.2	4	2	C32565	R-phycocerythrin be
580	5	10.2	8	2	PC1002	leucine-tRNA ligas	653	4	8.2	4	2	A60494	antineoplastic gly
581	5	10.2	8	2	S37141	rpsA protein - Erw	654	4	8.2	4	2	I51434	H4 histone - Affric
582	5	10.2	8	2	D61512	variant surface gl	655	4	8.2	4	2	I37027	protamine P1 - gor
583	5	10.2	8	2	PL0162	paramyosin - north	656	4	8.2	4	2	I37263	pyruvate kinase (E
584	5	10.2	8	2	JS0315	leucokinin V - Mad	657	4	8.2	4	2	A11490	glycoprotein compo
585	5	10.2	8	2	A47618	beta-galactosidase	658	4	8.2	4	2	H48394	whcy glycoprotein
586	5	10.2	8	2	S68325	blood cell protein	659	4	8.2	4	2	PC4392	fatty-acid synthas
587	5	10.2	8	2	S20162	leghemoglobin III	660	4	8.2	4	2	A20186	alpha-tubulin - Ch
588	5	10.2	9	2	A61357	phylocaerulein -	661	4	8.2	4	2	I48126	T-cell receptor be
589	5	10.2	9	2	A44873	caldesmon - rabbit	662	4	8.2	4	2	PT0652	T-cell receptor be
590	5	10.2	9	2	G41946	T-cell receptor ga	663	4	8.2	4	2	PT0514	T-cell receptor be
591	5	10.2	9	2	PH0935	T-cell receptor be	664	4	8.2	4	2	PT0516	T-cell receptor be
592	5	10.2	9	2	PH0918	T-cell receptor be	665	4	8.2	4	2	PT0604	T-cell receptor be
593	5	10.2	9	2	A43848	cell surface adhes	666	4	8.2	4	2	PT0687	T-cell receptor be
594	5	10.2	9	2	B39841	dextranucrase (EC	667	4	8.2	4	2	PT0652	T-cell receptor be
595	5	10.2	9	2	A39841	sucrose 3-glucosyl	668	4	8.2	4	2	PT0568	T-cell receptor be
596	5	10.2	9	2	S13333	alpha/beta-gliadin	669	4	8.2	4	2	PT0726	T-cell receptor be
597	5	10.2	9	2	UN0027	[Phe-6]-mosact - s	670	4	8.2	4	2	PT0727	T-cell receptor be
598	5	10.2	9	2	A61386	macrophage inhibit	671	4	8.2	4	2	F41946	T-cell receptor ga
599	5	10.2	9	2	S30494	cat gene leader pe	672	4	8.2	4	2	A41946	T-cell receptor be
600	5	10.2	9	2	B24362	chloramphenicol O-	673	4	8.2	4	2	A49792	T-cell receptor be
601	5	10.2	3	3	PQ0010	angiotensin-conver	674	4	8.2	4	2	PT0511	acylaminoacyl-pept
602	4	8.2	3	3	PT0578	T-cell receptor be	675	4	8.2	4	2	A61411	T-cell receptor be
603	4	8.2	3	3	PT0571	T-cell receptor be	676	4	8.2	4	2	I79564	amolethin - rat
604	4	8.2	3	3	S68328	blood cell protein	677	4	8.2	4	2	A60139	hypothetical TCL3
605	4	8.2	4	2	S18401	thyroglobulin - do	678	4	8.2	4	2	S71870	fatty-acid synthas
606	4	8.2	4	2	A61300	22K superhelical D	679	4	8.2	4	2	S55548	mcrB protein - Esc
607	4	8.2	4	2	I40505	hypothetical prote	680	4	8.2	4	2	B39127	phosphotransferase
608	4	8.2	4	2	T46627	hypothetical prote	681	4	8.2	4	2	S38516	phosphotransferase
609	4	8.2	4	2	A27897	glucan 1,4-alpha-g	682	4	8.2	4	2	A34818	vicilin 72K chain
610	4	8.2	4	2	S39390	myosin-light-chain	683	4	8.2	4	2	P80254	18K protein 5507 -
611	4	8.2	4	2	I61883	protamine P1 - ora	684	4	8.2	4	2	PQ0728	unidentified 5.0/1
612	4	8.2	4	2	S43959	Ig mu chain V regi	685	4	8.2	4	2	S70335	endospasm protein,
613	4	8.2	4	2	A26209	protein-glutamine	686	4	8.2	4	2	A12016	formylglycinamide

687 4 8.2 7 2 S68004 hucolin, 75K chain
688 4 8.2 7 2 A11483 aspartate transami
689 4 8.2 7 2 P70602 T-cell receptor be
690 4 8.2 7 2 P70666 T-cell receptor be
691 4 8.2 7 2 P70655 T-cell receptor be
692 4 8.2 7 2 P70665 T-cell receptor be
693 4 8.2 7 2 P70556 T-cell receptor be
694 4 8.2 7 2 P70542 T-cell receptor be
695 4 8.2 7 2 P70543 T-cell receptor be
696 4 8.2 7 2 P70722 T-cell receptor be
697 4 8.2 7 2 P70567 T-cell receptor be
698 4 8.2 7 2 P70676 T-cell receptor be
699 4 8.2 7 2 P70688 T-cell receptor be
700 4 8.2 7 2 P70728 T-cell receptor be
701 4 8.2 7 2 P70671 T-cell receptor be
702 4 8.2 7 2 A38671 T-cell receptor be
703 4 8.2 7 2 A35269 sex pheromone CAM3
704 4 8.2 7 2 S33567 tubulin beta-3 cha
705 4 8.2 7 2 A58512 venom heptapeptide
706 4 8.2 8 2 P4131 hypothetical prote
707 4 8.2 8 2 T10077 hypothetical prote
708 4 8.2 8 2 B33099 158K exoantigen -
709 4 8.2 8 2 P70298 Ig heavy chain CRD
710 4 8.2 8 2 P70323 Ig heavy chain CRD
711 4 8.2 8 2 P70043 phosphatidylethano
712 4 8.2 8 2 A35768 T-cell receptor al
713 4 8.2 8 2 P70527 T-cell receptor be
714 4 8.2 8 2 P70653 T-cell receptor be
715 4 8.2 8 2 P70557 T-cell receptor be
716 4 8.2 8 2 P70554 T-cell receptor be
717 4 8.2 8 2 P70724 T-cell receptor be
718 4 8.2 8 2 P70725 T-cell receptor be
719 4 8.2 8 2 P4372 telomeric and tetr
720 4 8.2 8 2 S45651 probable Na+-trans
721 4 8.2 8 2 A59495 Vesicle associated
722 4 8.2 8 2 P00726 unidentified 4.5/4
723 4 8.2 8 2 S11078 glucose-6-phosphat
724 4 8.2 8 2 A21440 variant surface gl
725 4 8.2 8 2 JS0318 leucokinin VIII -
726 4 8.2 8 2 T13818 cytochrome oxidase
727 4 8.2 8 2 F60588 sperm-activating p
728 4 8.2 8 2 G60588 sperm-activating p
729 4 8.2 8 4 I55411 hypothetical hist
730 4 8.2 9 2 P70002 chlorophyll a/b-bi
731 4 8.2 9 2 C36730 hucU protein - Kie
732 4 8.2 9 2 P70033 protein QA300033 -
733 4 8.2 9 2 P70225 Ig heavy chain CDR
734 4 8.2 9 2 P70315 Ig heavy chain CDR
735 4 8.2 9 2 S65865 collagen alpha 2(V
736 4 8.2 9 2 S36850 Ig heavy chain V r
737 4 8.2 9 2 P70634 T-cell receptor be
738 4 8.2 9 2 A33527 fructose-2,6-bisph
739 4 8.2 9 2 PS0253 glycine cleavage s
740 4 8.2 9 2 C57444 neuropeptide Grb-A
741 4 8.2 9 2 D44787 calliFMRamide 13
742 4 8.2 9 2 F41978 calliFMRamide 6 -
743 4 8.2 9 2 G41978 calliFMRamide 7 -
744 4 8.2 9 2 I50633 c-rel protein - ch
745 4 8.2 9 2 A37027 macrophage chemota
746 4 8.2 9 2 A60427 macrophage cytotox
747 4 8.2 9 2 QDRB delta sleep-induci
748 3 6.1 4 2 E44823 synaptosomal-assoc
749 3 6.1 4 2 S09478 globulin IV alpha
750 3 6.1 4 2 I40804 endoglucanase F -
751 3 6.1 5 2 A44955 alkanal monooxygen
752 3 6.1 7 2 S09652 hypothetical prote
753 3 6.1 7 2 T09512 NADH2 dehydrogenas
754 3 6.1 7 2 A59489 protein kinase Ci
755 3 6.1 7 2 S57274 triacylglycerol li
756 3 6.1 7 4 PC2056 trichodecenen I -
757 3 6.1 8 2 S66296 Na+-transporting A
758 3 6.1 8 2 PC4373 telomeric and tetr
759 2 4.1 3 3 A22565 R-phycoerythrin al

760 2 4.1 5 2 P00689 photosystem I 10.4
761 2 4.1 5 2 B61445 leu-enkephalin - b
762 2 4.1 5 2 A61445 leu-enkephalin - b
763 2 4.1 6 2 B44510 hypothetical prote
764 2 4.1 6 2 B35640 cerebellar degener
765 2 4.1 7 2 A60224 Met-enkephalin-Arg
766 2 4.1 8 2 P00012 cholecystokinin -
767 2 4.1 8 2 A43001 cholecystokinin -
768 2 4.1 9 2 P70108 late GI-69 protein
769 1 2.0 3 3 S13894 histidinol dehydro
770 1 2.0 3 3 B23751 spinal cord peptid
771 1 2.0 4 2 D41654 hypothetical prote
772 1 2.0 4 2 I40870 phospholipase C (E
773 1 2.0 4 2 A53284 T-cell receptor be
774 1 2.0 4 2 B3284 T-cell receptor be
775 1 2.0 4 2 S47552 T-cell receptor be
776 1 2.0 4 2 A60418 ubiquitin - rat
777 1 2.0 4 2 ECNK FMRamide - polych
778 1 2.0 5 2 A32516 cardioexcitatory n
779 1 2.0 5 2 B45525 cholecystokinin-5
780 1 2.0 6 2 B33932 actin I - malaria
781 1 2.0 7 4 PC2057 Ig mu chain D regi
782 1 2.0 9 2 PH0942 trichodecenen II -
783 0 0.0 3 3 E37196 bradykinin-potenti
784 0 0.0 3 3 E37196 bradykinin-potenti
785 0 0.0 3 3 A23751 spinal cord peptid
786 0 0.0 4 1 E25844 ancho-RFamide neur
787 0 0.0 4 2 A25844 auto-RF amide neu
788 0 0.0 4 2 S55238 pallidipin - assea
789 0 0.0 5 2 A33882 cadmium-binding pe
790 0 0.0 5 2 S65726 hemoglobin, extrac
791 0 0.0 7 2 B33882 cadmium-binding he

ALIGNMENTS

RESULT 1

B39745 endoglycosylceramidase (BC 3.2.1.123) I - Rhodococcus sp. (fragment)

C:Species: Rhodococcus sp.

C:Date: 30-Dec-1991 #sequence_revision 30-Dec-1991 #text_change 31-Dec-1993

C:Accession: B39745

R:Ito, M.; Ikegami, Y.; Yamagata, T.

J. Biol. Chem. 266, 7919-7926, 1991

A:Title: Activator proteins for glycosphingolipid hydrolysis by endoglycosylceramidases. E.I.

ble using these activator proteins.

A:Reference number: A39745; MUID:91210321; PMID:1850427

A:Accession: B39745

A>Status: preliminary

A:Molecule type: protein

A:Residues: 1-8 <ITO>

C:Cross-references: UNIPARC:UPI000017AD78

C:Keywords: glycosidase; hydrolase

Query Match 36.7%; Score 18; DB 2; Length 8;

Best Local Similarity 100.0%; Pred.No. 2.8e+05;

Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3 APP 5

Db 1 APP 3

RESULT 2

B41983

orf dowaetream to bacterioferritin - Azotobacter vinelandii (fragment)

C:Species: Azotobacter vinelandii

C:Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004

C:Accession: B41983

R:Grossman, M.J.; Hinton, S.M.; Minak-Bernero, V.; Slaughter, C.; Stiefel, E.I.

Proc. Natl. Acad. Sci. U.S.A. 89, 2419-2423, 1992

A:Title: Unification of the ferritin family of proteins.

A:Reference number: A41983; MUID:92196129; PMID:1549605
 A:Accession: B41983
 A:Status: preliminary; not compared with conceptual translation
 A:Molecule type: nucleic acid; protein
 A:Residues: 1-9 <GRO>
 A:Cross-references: UNIPROT:P25825; UNIPARC:UPI000013A327; GB:M83692; NID:gl42297; PIDN:
 A:Note: sequence extracted from NCBI backbone (NCBI:88442)

Query Match 36.7%; Score 18; DB 2; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 APP 5
 Db 2 APP 4

RESULT 3

B37988
 acid proteinase light chain - slime mold (Physarum polycephalum) (fragment)
 C:Species: Physarum polycephalum
 C:Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 30-Sep-1993
 A:Accession: B37988
 R:Murakami-Murofuehi, K.; Takahashi, T.; Minowa, Y.; Iino, S.; Takeuchi, T.; Kitagaki-Og
 J. Biol. Chem. 265, 19898-19903, 1990
 A:Title: Purification and characterization of a novel intracellular acid proteinase from
 A:Reference number: A37988; MUID:91060608; PMID:2246266
 A:Accession: B37988
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 1-5 <MUR>
 A:Cross-references: UNIPARC:UPI000017B19F

Query Match 34.7%; Score 17; DB 2; Length 5;
 Best Local Similarity 66.7%; Pred. No. 2.8e+05;
 Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PPV 6
 Db 3 PPI 5

RESULT 4

PC7078
 unidentified 48.7K protein - mouse (fragment)
 C:Species: Mus musculus (house mouse)
 C:Date: 18-Aug-2000 #sequence_revision 18-Aug-2000 #text_change 09-Jul-2004
 A:Accession: PC7078
 R:Tsugita, A.; Kawakami, T.; Uchida, T.; Sakai, T.; Kano, M.; Matsui, T.; Watanabe, Y.;
 Electrophoresis 21, 1853-1871, 2000
 A:Title: Proteome analysis of mouse brain: Two-dimensional electrophoresis profiles of b
 A:Reference number: PC7078
 A:Accession: PC7078
 A:Molecule type: protein
 A:Residues: 1-9 <TSU>
 A:Cross-references: UNIPROT:Q91YTO; UNIPARC:UPI000017C882
 A:Experimental source: strain C57BL/6Cr Slc, male; brain, striatum
 C:Keywords: brain

Query Match 34.7%; Score 17; DB 2; Length 9;
 Best Local Similarity 75.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAP 4
 Db 4 TTAP 7

RESULT 5

E61491
 seed protein wa-5 - winged bean (fragment)
 C:Species: Psophocarpus tetragonolobus (winged bean)
 C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 07-Oct-1994

C:Accession: E61491

R.Hirano, H.
 J. Protein Chem. 8, 115-130, 1989
 A:Title: Microsequence analysis of winged bean seed proteins electroblooded from two-di
 A:Reference number: A61491; MUID:89351606; PMID:2765119
 A:Accession: E61491
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 1-7 <HIR>
 A:Cross-references: UNIPARC:UPI000017B074
 C:Keywords: glycoprotein; seed

Query Match 32.7%; Score 16; DB 2; Length 7;
 Best Local Similarity 75.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAP 4
 Db 1 STVP 4

RESULT 6

PT0530
 T-cell receptor beta chain V-D-J region (100-4AK) - mouse (fragment)
 C:Species: Mus musculus (house mouse)
 C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
 A:Accession: PT0530
 R:Feeney, A.J.
 J. Exp. Med. 174, 115-124, 1991
 A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
 A:Reference number: PT0509; MUID:91277601; PMID:1711558
 A:Accession: PT0530
 A:Molecule type: mRNA
 A:Residues: 1-8 <FEE>
 A:Cross-references: UNIPARC:UPI000017C7BB
 A:Experimental source: adult thymus, strain BALB/c
 C:Keywords: T-cell receptor

Query Match 32.7%; Score 16; DB 2; Length 8;
 Best Local Similarity 75.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAP 4
 Db 2 SSAP 5

RESULT 7

PT0559
 T-cell receptor beta chain V-D-J region (126-1BH) - mouse (fragment)
 C:Species: Mus musculus (house mouse)
 C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
 A:Accession: PT0559
 R:Feeney, A.J.
 J. Exp. Med. 174, 115-124, 1991
 A:Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
 A:Reference number: PT0509; MUID:91277601; PMID:1711558
 A:Accession: PT0559
 A:Molecule type: mRNA
 A:Residues: 1-8 <FEE>
 A:Cross-references: UNIPARC:UPI000017C80E
 A:Experimental source: day 18 fetal thymus, strain BALB/c
 C:Keywords: T-cell receptor

Query Match 32.7%; Score 16; DB 2; Length 8;
 Best Local Similarity 40.0%; Pred. No. 2.8e+05;
 Matches 2; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAP 5
 Db 1 ASGPP 5

```

RESULT 8
S43971
tumor-associated antigen MUT1 - mouse
C:Species: Mus musculus (house mouse)
C:Date: 20-Oct-1994 #sequence_revision 17-Nov-1995 #text_change 16-Aug-2004
C:Accession: S43971
R:Mandelblom, O.; Berke, G.; Fridkin, M.; Feldman, M.; Eisenstein, M.; Eisenbach, L.
Nature 369, 67-71, 1994
A:Title: CTL induction by a tumour-associated antigen octapeptide derived from a murine
A:Reference number: S43971; MUID:94217811; PMID:8164742
A:Accession: S43971
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-8 <MAN>
A:Cross-references: UNIPROT:Q7M067; UNIPARC:UPI000017A4FF

Query Match 32.7%; Score 16; DB 2; Length 8;
Best Local Similarity 60.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAPP 5
: ||
Db 4 NTAQP 8

RESULT 9
S21288
lectin - potato (fragment)
C:Species: Solanum tuberosum (potato)
C:Date: 19-Mar-1997 #sequence_revision 05-Dec-1998 #text_change 09-Jul-2004
C:Accession: S21288
R:Millar, D.J.; Allen, A.K.; Smith, C.G.; Sidebottom, C.; Slabas, A.R.; Bolwell, G.P.
Biochem. J. 283, 813-821, 1992
A:Title: Chitin-binding proteins in potato (Solanum tuberosum L.) tuber. Characterization
A:Reference number: S21288; MUID:92272683; PMID:1590771
A:Accession: S21288
A:Molecule type: protein
A:Residues: 1-8 <MIL>
A:Cross-references: UNIPROT:Q7M1V6; UNIPARC:UPI000017B0BF
A:Experimental source: var. Ulster Sceptre
C:Function:
A:Description: may be involved in defence mechanism of the plant
C:Keywords: hydroxyproline; lectin

Query Match 30.6%; Score 15; DB 2; Length 8;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 3 APP 5
: ||
Db 6 SPP 8

RESULT 10
A31570
angiotensin-converting enzyme inhibitor - yellowfin tuna
C:Species: Thunnus albacares (yellowfin tuna)
C:Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 05-Oct-2004
C:Accession: A31570
R:Kohama, Y.; Matsumoto, S.; Oka, H.; Teramoto, T.; Okabe, M.; Mimura, T.
Biochem. Biophys. Res. Commun. 155, 332-337, 1988
A:Title: Isolation of angiotensin-converting enzyme inhibitor from tuna muscle.
A:Reference number: A31570; MUID:88326322; PMID:3415688
A:Accession: A31570
A:Molecule type: protein
A:Residues: 1-8 <KOH>
A:Cross-references: UNIPROT:P18691; UNIPARC:UPI0000035267
A>Note: the source is designated as Neothunnus macropterus
C:Keywords: angiotensin-converting enzyme inhibitor

Query Match 30.6%; Score 15; DB 2; Length 8;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 3 APP 5
: ||
Db 6 SPP 8

RESULT 11
B30572
T-cell receptor beta chain C region (CRTB29) - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 03-Apr-1989 #sequence_revision 03-Apr-1989 #text_change 30-May-1997
C:Accession: B30572
R:Williams, C.B.; Gutman, G.A.
J. Immunol. 142, 1027-1035, 1989
A:Title: T cell receptor beta-chain genes in the rat. Availability and pattern of utilization
A:Reference number: A30563; MUID:89110038; PMID:2563271
A:Accession: B30572
A>Status: preliminary; not compared with conceptual translation
A:Molecule type: mRNA
A:Residues: 1-9 <WIL>
A:Cross-references: UNIPARC:UPI000017C9D5
C:Keywords: T-cell receptor

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 40.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPP 5
: ||
Db 5 TVTPP 9

RESULT 12
S55696
phosphoenolpyruvate carboxykinase - Trypanosoma brucei
C:Species: Trypanosoma brucei
C:Date: 28-Oct-1995 #sequence_revision 03-Nov-1995 #text_change 09-Jul-2004
C:Accession: S55696
R:Hunt, M.; Koehler, P.
Biochim. Biophys. Acta 1249, 15-22, 1995
A:Title: Purification and characterization of phosphoenolpyruvate carboxykinase from Try
A:Reference number: S55696; MUID:95284106; PMID:7766679
A:Accession: S55696
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <HUN>
A:Cross-references: UNIPROT:Q7M3S5; UNIPARC:UPI000017B599

Query Match 30.6%; Score 15; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 4 PPVH 7
: ||
Db 2 PIIH 5

RESULT 13
PQ0727
H2 class I protein [imported] - rice (fragment)
C:Species: Oryza sativa (rice)
C:Date: 20-Apr-2000 #sequence_revision 20-Apr-2000 #text_change 20-Apr-2000
C:Accession: PQ0727
R:Komatsu, S.; Kajiwara, H.; Hirano, H.
Theor. Appl. Genet. 86, 935-942, 1993
A:Title: A rice protein library; a data-file of rice proteins separated by two-dimension
A:Reference number: PQ0696
A:Accession: PQ0727
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-7 <KOM>
```

A;Cross-references: UNIPARC:UPI000017B10C

Query Match 28.6%; Score 14; DB 2; Length 7;
Best Local Similarity 75.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPV 6
||
Db 2 APAY 5

RESULT 14

S71299
ICL2 protein - Paramecium tetraurelia (fragment)

C;Species: Paramecium tetraurelia

C;Date: 11-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 07-Dec-1999

C;Accession: S71299

R;Madeddu, L.; Klorz, C.; le Caer, J.P.; Beisson, J.

Eur. J. Biochem. 238, 121-128, 1996

A;Title: Characterization of centrin genes in Paramecium.

A;Reference number: S71298; MUID:96248429; PMID:8665928

C;Accession: S71299

A;Molecule type: protein

A;Residues: 1-7 <HAD>

A;Cross-references: UNIPARC:UPI000017B66B

A;Experimental source: strain d4-2

C;Genetics:

A;Genetic code: SGCS

Query Match 28.6%; Score 14; DB 2; Length 7;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 3 PP 4

RESULT 15

S09027

carboxylesterase (EC 3.1.1.1) MK2, microsomal - crab-eating macaque (fragment)

C;Species: Macaca fascicularis (crab-eating macaque)

C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 28-Apr-1993

C;Accession: S09027

R;Hosokawa, M.; Maki, T.; Satoh, T.

Arch. Biochem. Biophys. 277, 219-227, 1990

A;Title: Characterization of molecular species of liver microsomal carboxylesterases of

A;Reference number: S09021; MUID:90179180; PMID:2310190

C;Accession: S09027

A;Molecule type: protein

A;Residues: 1-7 <HOS>

A;Cross-references: UNIPARC:UPI000017C058

C;Keywords: carboxylic ester hydrolase

Query Match 28.6%; Score 14; DB 2; Length 7;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 STAPPV 6
||
Db 2 SASPXV 7

RESULT 16

PT0283

Ig heavy chain CRD3 region (clone 4-94B) - human (fragment)

C;Species: Homo sapiens (man)

C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996

C;Accession: PT0283

R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.

J. Exp. Med. 173, 395-407, 1991

A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and

A;Reference number: PT0222; MUID:91108337; PMID:1899102

A;Accession: PT0283

A;Molecule type: DNA

A;Residues: 1-7 <YAM>

A;Cross-references: UNIPARC:UPI000017C206

A;Experimental source: B lymphocyte

C;Keywords: heterotetramer; immunoglobulin

Query Match 28.6%; Score 14; DB 2; Length 7;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 6 PP 7

RESULT 17

A61081

tryptophyllin, basic - Rohde's leaf frog

C;Species: Phyllomedusa rohdei (Rohde's leaf frog)

C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 05-Oct-2004

C;Accession: A61081

R;Montecucchi, P.C.; Vincenti, M.; Lazarini, A.M.; Rusconi, L.; Erspamer, V.

Int. J. Pept. Protein Res. 33, 391-395, 1989

A;Title: Isolation, structure determination and synthesis of a novel tryptophan-containing

A;Reference number: A61081

C;Accession: A61081

A;Molecule type: protein

A;Residues: 1-7 <MON>

A;Cross-references: UNIPARC:UPI000002C690

C;Comment: The biological activity of this peptide was not determined.

C;Keywords: amidated carboxyl end; hydroxyproline; skin

F;3/Modified site: 4-hydroxyproline (Pro) #status experimental

F;7/Modified site: amidated carboxyl end (Pro) #status experimental

Query Match 28.6%; Score 14; DB 2; Length 7;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 2 PP 3

RESULT 18

SI6324

hypothetical protein 2 - Arabidopsis thaliana

C;Species: Arabidopsis thaliana (mouse-ear cress)

C;Date: 21-Nov-1993 #sequence_revision 12-May-1995 #text_change 21-Jul-2000

C;Accession: SI6324

R;Ruberti, I.; Sessa, G.; Lucchetti, S.; Morelli, G.

EMBO J. 10, 1787-1791, 1991

A;Title: A novel class of plant proteins containing a homeodomain with a closely linked

A;Reference number: SI6323; MUID:91266907; PMID:1675603

C;Accession: SI6324

A;Status: translation not shown

A;Molecule type: mRNA

A;Residues: 1-8 <RUB>

A;Cross-references: UNIPARC:UPI0000011DF52; EMBL:X58821; NID:g16327; PIDN:CAA41624.1; PID

Query Match 28.6%; Score 14; DB 2; Length 8;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 7 PP 8

RESULT 19

SI0783

enamelin f - bovine (fragment)

C;Species: Bos primigenius taurus (cattle)

C;Date: 19-Mar-1997 #sequence_revision 21-Nov-1998 #text_change 21-Nov-1998

C;Accession: S10783

R;Strawich, E.; Glimcher, M.J.

Eur. J. Biochem. 191, 47-56, 1990

A;Title: Tooth 'enamelins' identified mainly as serum proteins. Major 'enamelin' is albumin

A;Reference number: S10780; MUID:90336641; PMID:2379503

C;Accession: S10783

A;Molecule type: protein

A;Residues: 1-8 <STR>

A;Cross-references: UNIPARC:UPI000017C505

C;Keywords: enamel; phosphoprotein

Query Match 28.6%; Score 14; DB 2; Length 8;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PP 5

Db 4 PP 5

RESULT 20

E47393

neuropeptide callatostatin 5 - bluebottle fly (Calliphora vomitoria)

C;Species: Calliphora vomitoria

C;Date: 16-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004

C;Accession: E47393

R;Duve, H.; Johnsen, A.H.; Scott, A.G.; Yu, C.G.; Yagi, K.J.; Tobe, S.S.; Thorpe, A.

Proc. Natl. Acad. Sci. U.S.A. 90, 2456-2460, 1993

A;Title: Callatostatins: neuropeptides from the blowfly Calliphora vomitoria with sequen

A;Reference number: A47393; MUID:93211980; PMID:8460157

C;Accession: E47393

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-8 <DUV>

A;Cross-references: UNIPROT:P41841; UNIPARC:UPI000002EAB5

A;Experimental source: whole flies

A;Note: sequence extracted from NCBI backbone (NCBIP:128482)

Query Match 28.6%; Score 14; DB 2; Length 8;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PP 5

Db 2 PP 3

RESULT 21

S65433

bradykinin - horn fly (fragment)

C;Species: Haematobia irritans (horn fly)

C;Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 13-Mar-1997

C;Accession: S65433

R;Wijffels, G.; Fitzgerald, C.; Gough, J.; Riding, G.; Elvin, C.; Kemp, D.; Willadsen, E

Eur. J. Biochem. 237, 414-423, 1996

A;Title: Cloning and characterisation of angiotensin-converting enzyme from the dipteran

A;Reference number: S65431; MUID:96215437; PMID:8647080

C;Accession: S65433

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-9 <WIJ>

A;Cross-references: UNIPARC:UPI000002CF4A

A;Note: the source is designated as Haematobia irritans exigua

Query Match 28.6%; Score 14; DB 2; Length 9;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PP 5

Db 2 PP 3

RESULT 22

B38740

Ig kappa chain C region (PY20) - mouse (fragment)

C;Species: Mus musculus (house mouse)

C;Date: 19-Mar-1997 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998

C;Accession: B38740

R;Ruff-Jamison, S.; Campos-Gonzalez, R.; Glenney Jr., J.R.

J. Biol. Chem. 266, 6607-6613, 1991

A;Title: Heavy and light chain variable region sequences and antibody properties of anti

A;Reference number: A38740; MUID:91177923; PMID:1706720

C;Accession: B38740

A;Status: preliminary

A;Molecule type: mRNA

A;Residues: 1-9 <RUF>

A;Cross-references: UNIPARC:UPI0000017C6D4

Query Match 28.6%; Score 14; DB 2; Length 9;

Best Local Similarity 75.0%; Pred. No. 2.8e+05;

Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 3 APPV 6

Db 4 APTV 7

RESULT 23

S26508

collagen alpha 2(VI) chain - bovine (fragment)

C;Species: Bos primigenius taurus (cattle)

C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004

C;Accession: S26508

R;Jander, R.; Rautenberg, J.; Glanville, R.W.

Eur. J. Biochem. 133, 39-46, 1983

A;Title: Further characterization of the three polypeptide chains of bovine and human sh

A;Reference number: S26506; MUID:83209648; PMID:6852033

C;Accession: S26508

A;Status: preliminary

A;Molecule type: protein

A;Residues: 1-9 <JAN>

A;Cross-references: UNIPROT:Q7M2M9; UNIPARC:UPI0000017C4E6

C;Keywords: hydroxyproline

F;7/Modified site: hydroxyproline (Pro) #status experimental

Query Match 28.6%; Score 14; DB 2; Length 9;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PP 5

Db 6 PP 7

RESULT 24

A43065

hydroxyproline-3-bradykinin - frog (Haleophryne purcellii)

C;Species: Haleophryne purcellii

C;Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C;Accession: A43065

R;Nakajima, T.; Yasuhara, T.; Erspamer, G.F.; Visser, J.

Experientia 35, 1133, 1979

A;Title: Occurrence of Hyp(3)-bradykinin in methanol extracts of the skin of the South A

A;Reference number: A43065; MUID:80024576; PMID:488255

C;Accession: A43065

A;Molecule type: protein

A;Residues: 1-9 <NAK>

A;Cross-references: UNIPROT:Q7LZ17; UNIPARC:UPI0000002CF4A

C;Keywords: bradykinin; hydroxyproline; skin

F;3/Modified site: hydroxyproline (Pro) #status experimental

Query Match 28.6%; Score 14; DB 2; Length 9;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;

Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 2 PP 3

RESULT 25
PC7073
ubiquinol-cytochrome-c reductase (EC 1.10.2.2) core protein II - mouse (fragment)
C:Species: Mus musculus (house mouse)
C:Date: 18-Aug-2000 #sequence_revision 18-Aug-2000 #text_change 09-Jul-2004
C:Accession: PC7073
R:Tsuigita, A.; Kawakami, T.; Uchida, T.; Sakai, T.; Kamo, M.; Matsui, T.; Watanabe, Y.;
Electrophoresis 21, 1853-1871, 2000
A:Title: Proteome analysis of mouse brain: Two-dimensional electrophoresis profiles of b
A:Reference number: PC7072
A:Accession: PC7073
A:Molecule type: protein
A:Residues: 1-9 <TSU>
A:Cross-references: UNIPROT:Q9CVK7; UNIPARC:UPI000017CDB7
C:Keywords: brain; core protein; oxidoreductase

Query Match 28.6%; Score 14; DB 2; Length 9;
Best Local Similarity 75.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 3 APPV 6
||
Db 5 APKV 8

RESULT 26
B60246
ornitho-kinin - chicken
C:Species: Gallus gallus (chicken)
C:Date: 11-Dec-1992 #sequence_revision 11-Dec-1992 #text_change 16-Aug-2004
C:Accession: B60246
R:Kimura, M.; Sueyoshi, T.; Morita, T.; Tanaka, K.; Iwanaga, S.
Adv. Exp. Med. Biol. 247A, 359-367, 1989
A:Title: Ornitho-kininogen and ornitho-kinin: isolation, characterization and chemical e
A:Reference number: A60246; MUID:90102072; PMID:2603803
A:Accession: B60246
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <KIM>
A:Cross-references: UNIPROT:Q7L250; UNIPARC:UPI000017A4F8

Query Match 28.6%; Score 14; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 2 PP 3

RESULT 27
A26744
bradykinin-like peptide - garden dagger wasp
N:Alternate names: Thr-6-bradykinin
C:Species: Megascolia flavifrons (garden dagger wasp)
C:Date: 08-Mar-1989 #sequence_revision 08-Mar-1989 #text_change 05-Oct-2004
C:Accession: A26744
R:Yasuhara, T.; Mantel, P.; Nakajima, T.; Piek, T.
Toxicol 25, 527-535, 1987
A:Title: Two kinins isolated from an extract of the venom reservoirs of the solitary was
A:Reference number: A94322; MUID:87293024; PMID:3617088
A:Accession: A26744
A:Molecule type: protein
A:Residues: 1-9 <YAS>
A:Cross-references: UNIPARC:UPI000012DF29

Query Match 28.6%; Score 14; DB 2; Length 9;

Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 2 PP 3

RESULT 28
A61057
Thr-6 bradykinin - scoliid wasp (Colpa interrupta)
C:Species: Colpa interrupta
C:Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 05-Oct-2004
C:Accession: A61057
R:Piek, T.; Hue, B.; Mantel, P.; Nakajima, T.; Pelhate, M.; Yasuhara, T.
Comp. Biochem. Physiol. C 96, 157-162, 1990
A:Title: Threonine(6)-bradykinin in the venom of the wasp Colpa interrupta (F.) presynaf
A:Reference number: A61057; MUID:91130217; PMID:1980872
A:Accession: A61057
A:Molecule type: protein
A:Residues: 1-9 <PIE>
A:Cross-references: UNIPARC:UPI000012DF29
C:Keywords: bradykinin; presynaptic neurotoxin; venom

Query Match 28.6%; Score 14; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 2 PP 3

RESULT 29
A60579
bradykinin-like peptide - slider turtle
C:Species: Pseudemys scripta (slider)
C:Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 05-Oct-2004
C:Accession: A60579
R:Conlon, J.M.; Hicks, J.W.; Smith, D.D.
Endocrinology 126, 985-991, 1990
A:Title: Isolation and biological activity of a novel kinin ((Thr(6))bradykinin) from th
A:Reference number: A60579; MUID:90126625; PMID:2298179
A:Accession: A60579
A:Molecule type: protein
A:Residues: 1-9 <CON>
A:Cross-references: UNIPARC:UPI000012DF29
C:Comment: This peptide increases aortic blood flow but, unlike bradykinin in mammalian
C:Keywords: plasma

Query Match 28.6%; Score 14; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 4 PP 5
||
Db 2 PP 3

RESULT 30
A61363
bradykinin - common frog
C:Species: Rana temporaria (common frog)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C:Accession: A61363
R:Anastasi, A.; Erspamer, V.; Bertaccini, G.
Comp. Biochem. Physiol. A 14, 43-52, 1965
A:Title: Occurrence of bradykinin in the skin of Rana temporaria.
A:Reference number: A61363
A:Accession: A61363
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <ANA>

A;Cross-references: UNIPROT:Q7LZJ8; UNIPARC:UPI0000002CF4A
C;Keywords: skin

Query Match 28.6%; Score 14; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PP 5
||
Db 2 PP 3

RESULT 31

A61358
bradykinin-like peptide I - Japanese pond frog
C;Species: Rana nigromaculata (Japanese pond frog)
C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C;Accession: A61358
R;Nakajima, T.
Chem.Pharm. Bull. 16, 769-770, 1968
A;Title: Occurrence of a new active peptide on smooth muscle and bradykinin in the skin
A;Reference number: A61358; MUID:68412013; PMID:5677638
A;Accession: A61358
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <NAK>
A;Cross-references: UNIPROT:Q7LZ54; UNIPARC:UPI0000017A4F0
C;Keywords: skin

Query Match 28.6%; Score 14; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 4 PP 5
||
Db 2 PP 3

RESULT 32

S15595
orf 2 rara 5'-region - human
C;Species: Homo sapiens (man)
C;Date: 04-Jun-1999 #sequence_revision 04-Jun-1999 #text_change 28-Jun-1999
C;Accession: S15595
R;Brand, N.J.; Petkovich, M.; Chambon, P.
Nucleic Acids Res. 18, 6799-6806, 1990
A;Title: Characterization of a functional promoter for the human retinoic acid receptor-
A;Reference number: S15594; MUID:91088249; PMID:2175878
A;Accession: S15595
A;Molecule type: DNA
A;Residues: 1-9 <BRA>
A;Cross-references: UNIPARC:UPI000017CBEF; EMBL:X56057; NID:g35875
A;Note: this ORF from Fig. 2 is not annotated in GenBank entry HSRARAL, release 111.0
C;Comment: This sequence is not thought to be translated.
C;Genetics:
A;Gene: GDB:RARA
A;Cross-references: GDB:120337; OMIM:180240
A;Map position: 17q12-17q12

Query Match 28.6%; Score 14; DB 4; Length 9;
Best Local Similarity 60.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPP 5
||
Db 4 STRAP 8

RESULT 33

A44916
mosquitocidal toxin 21 - Bacillus sphaericus (fragment)
C;Species: Bacillus sphaericus
C;Date: 01-Apr-1993 #sequence_revision 18-Nov-1994 #text_change 23-Mar-1995

C;Accession: A44916
R;Thanabalu, T.; Hindley, J.; Berry, C.
J. Bacteriol. 174, 5051-5056, 1992
A;Title: Proteolytic processing of the mosquitocidal toxin from Bacillus sphaericus SSII
A;Reference number: A44916; MUID:92332441; PMID:1352768
C;Accession: A44916
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: nucleic acid
A;Residues: 1-6 <THA>
A;Cross-references: UNIPARC:UPI0000017ACA7
A;Experimental source: SSII-1
A;Note: sequence extracted from NCBI backbone (NCBIP:108973)

Query Match 26.5%; Score 13; DB 2; Length 6;
Best Local Similarity 60.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPP 5
||
Db 1 SMASP 5

RESULT 34

PT0654
T-cell receptor beta chain V-D-J region (121-1BK) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0654
R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991

A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0654
A;Status: translation not shown
A;Molecule type: mRNA
A;Residues: 1-7 <PEE>
A;Cross-references: UNIPARC:UPI0000017C7EA
A;Experimental source: day 4 postnatal thymus, strain BALB/c
C;Keywords: T-cell receptor

Query Match 26.5%; Score 13; DB 2; Length 7;
Best Local Similarity 75.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 STAP 4
||
Db 2 SGAP 5

RESULT 35

Al5398
choline oxidase (EC 1.1.3.17) - Alcaligenes sp. (tentative sequence) (fragment)
C;Species: Alcaligenes sp.
C;Date: 05-Jun-1997 #sequence_revision 05-Jun-1987 #text_change 09-Jul-2004
C;Accession: Al5398
R;Ohka-Fukuyama, M.; Miyake, Y.; Emi, S.; Yamano, T.
J. Biochem. 88, 197-203, 1980
A;Title: Identification and properties of the prosthetic group of choline oxidase from A
A;Reference number: Al5398; MUID:81006769; PMID:6997283
A;Accession: Al5398
A;Molecule type: protein
A;Residues: 1-7 <OHT>
A;Cross-references: UNIPROT:P16101; UNIPARC:UPI000001278AA
C;Keywords: oxidoreductase

Query Match 26.5%; Score 13; DB 2; Length 7;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 5 PVNH 8
||
Db 3 PNHS 6

RESULT 36
A58725
virotoxin - destroying angel
C:Species: Amanita virosa (destroying angel)
C>Date: 20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 20-Apr-2001
C:Accession: A58725
R:Faustich, H.; Buku, A.; Bodenmueller, H.; Wieland, T.
Biochemistry 19, 334-343, 1980
A>Title: Virotoxins: actin-binding cyclic peptides of Amanita virosa mushrooms.
A:Reference number: A58725; MUID:6893271; PMID:6893271
A:Accession: A58725
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-7 <FAU>
A:Cross-references: UNIPARC:UPI000017CF29
C:Keywords: D-amino acid; hydroxyproline; toxin; unencoded polypeptide
F:1-7/Cross-link: cyclopeptide (Val-Leu) #status experimental
F:2/Modified site: D-threonine (Thr) #status experimental
F:3/Modified site: D-serine (Ser) #status experimental
F:4/Modified site: (3R,4S)-3,4-dihydroxyproline (Pro) #status experimental
F:6/Modified site: 2'-methylsulfonyltryptophan (Trp) #status experimental
F:7/Modified site: 4,5-dihydroxyisoleucine (Leu) #status experimental

Query Match 26.5%; Score 13; DB 4; Length 7;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAP 4
:|
Db 2 TSP 4

RESULT 37
A37832
Phenol 2-monooxygenase (EC 1.14.13.7) chain P5 - Pseudomonas sp. (strain CF600) (fragment)
C:Species: Pseudomonas sp.
C>Date: 14-Jun-1991 #sequence_revision 14-Jun-1991 #text_change 23-Jun-1993
C:Accession: A37832
R:Powlowski, J.; Shingler, V. 1990
J. Bacteriol. 172, 6834-6840, 1990
A>Title: In vitro analysis of polypeptide requirements of multicomponent phenol hydroxylase.
A:Reference number: A37832; MUID:91072231; PMID:2254259
A:Accession: A37832
A>Status: preliminary
A:Molecule type: protein
A:Residues: 1-4 <POW>
A:Cross-references: UNIPARC:UPI000017A9A5
C:Keywords: oxidoreductase

Query Match 24.5%; Score 12; DB 2; Length 4;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 7 HNV 9
:|
Db 2 YNV 4

RESULT 38
T10954
hypothetical protein 3 - spring vetch
C:Species: Vicia sativa (spring vetch)
C>Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
C:Accession: T10954
R:Christiansen, A.; Hansen, A.C.; Vijn, I.; Pallisgard, N.; Larsen, K.; Yang, W.C.; Bissel
submitted to the EMBL Data Library, December 1995
A:Description: A novel type of DNA binding protein interacts with a conserved sequence in
A:Reference number: Z17228
A:Accession: T10954
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-5 <CHR>

A:Cross-references: UNIPARC:UPI000011B9CD; EMBL:X95995; NID:g1360633; PID:e225862

Query Match 24.5%; Score 12; DB 2; Length 5;
Best Local Similarity 33.3%; Pred. No. 2.8e+05;
Matches 1; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 6 VHN 8
:|
Db 3 IHS 5

RESULT 39
JS0319
subesophageal ganglion pentapeptide - house cricket
C:Species: Acheta domesticus (house cricket)
C>Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
C:Accession: JS0319
R:Wicker, C.; Wicker, C.
Comp. Biochem. Physiol. C 88, 185-187, 1987
A>Title: Isolation and structure of a peptide isolated from the subesophageal ganglion
A:Reference number: JS0319
A:Accession: JS0319
A:Molecule type: protein
A:Residues: 1-5 <WIC>
A:Cross-references: UNIPROT:P19991; UNIPARC:UPI00001361CE

Query Match 24.5%; Score 12; DB 2; Length 5;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 STAP 4
:|
Db 1 AAP 4

RESULT 40
I51317
BHLH transcription factor inhibitor - African clawed frog (fragment)
C:Species: Xenopus laevis (African clawed frog)
C>Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000
C:Accession: I51317
R:Zhang, H.; Reynaud, S.; Kloc, M.; Etkin, L.D.; Spohr, G.
Mech. Dev. 50, 119-130, 1995
A>Title: Id gene activity during Xenopus embryogenesis.
A:Reference number: I51316; MUID:95344988; PMID:7619724
A:Accession: I51317
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-6 <ZHA>
A:Cross-references: UNIPARC:UPI000011EA87; GB:S79038; NID:g1042006; PIDN:AAD14294.1; PID
C:Genetics:
A:Gene: Xltdb

Query Match 24.5%; Score 12; DB 2; Length 6;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 STAP 4
:|
Db 2 ATEP 5

RESULT 41
PT0280
Ig heavy chain CRD3 region (clone 4-91B) - human (fragment)
C:Species: Homo sapiens (man)
C>Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
C:Accession: PT0280
R:Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A>Title: Preferential utilization of specific immunoglobulin heavy chain diversity and
A:Reference number: PT0222; MUID:91108337; PMID:1899102
A:Accession: PT0280

A:Molecule type: DNA
A:Residues: 1-6 <YAM>
A:Cross-references: UNIPARC:UPI000017C204
A:Experimental source: B lymphocyte
C:Keywords: heterotetramer; immunoglobulin

Query Match 24.5%; Score 12; DB 2; Length 6;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2 TAP 4
||
Db 4 SAP 6

RESULT 42

PC1316
large granule L3 chain - horseshoe crab (Tachypleus tridentatus) (fragment)
C:Species: Tachypleus tridentatus
C:Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 07-May-1999
C:Accession: PC1316
R:Shigenaga, T.; Takayenoki, Y.; Kawasaki, S.; Seki, N.; Muta, T.; Toh, Y.; Ito, A.; Iwa
J. Biochem. 114, 307-316, 1993
A:Title: Separation of large and small granules from horseshoe crab (Tachypleus tridentatus)
A:Reference number: PC1309; MUID:94110249; PMID:8282718
A:Accession: PC1316
A:Molecule type: protein
A:Residues: 1-7 <SHI>
A:Cross-references: UNIPARC:UPI000017BDFA
C:Comment: This protein participates in immobilization of invading microbes.

Query Match 24.5%; Score 12; DB 2; Length 7;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 TAPP 5
||
Db 1 TSQP 4

RESULT 43

PT0246
Ig heavy chain CRD3 region (clone 2-103D) - human (fragment)
C:Species: Homo sapiens (man)
C:Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
C:Accession: PT0246
R:Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A:Title: Preferential utilization of specific immunoglobulin heavy chain diversity and j
A:Reference number: PT0222; MUID:91108337; PMID:1899102
A:Accession: PT0246
A:Molecule type: DNA
A:Residues: 1-7 <YAM>
A:Cross-references: UNIPARC:UPI000017C1E5
A:Experimental source: B lymphocyte
C:Keywords: heterotetramer; immunoglobulin

Query Match 24.5%; Score 12; DB 2; Length 7;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 HNV 9
||
Db 1 HEV 3

RESULT 44

S66419
tetrameric proteinase precursor, 60K, dithiothreitol-sensitive - spinach (fragment)
C:Species: Spinacia oleracea (spinach)
C:Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 31-Dec-2004
C:Accession: S66419
R:Kuwabara, T.

FEBS Lett. 371, 195-198, 1995

A:Title: The 60-kDa precursor to the dithiothreitol-sensitive tetrameric protease of spin
A:Reference number: S66419; MUID:95402209; PMID:7672127
A:Accession: S66419
A:Molecule type: protein
A:Residues: 1-9 <KUW>
A:Cross-references: UNIPROT:Q9T2K8; UNIPROT:Q41388; UNIPARC:UPI000017AF31
C:Superfamily: polyphenol oxidase, plant type

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 42.9%; Pred. No. 2.8e+05;
Matches 3; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 3 APPVHNV 9
||
Db 1 APILPDV 7

RESULT 45

SI3889
phosphoenolpyruvate carboxylase (EC 4.1.1.31) - maize
C:Species: Zea mays (maize)
C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Dec-2004
C:Accession: SI3889
R:Jiao, J.; Chollet, R.
Arch. Biochem. Biophys. 283, 300-305, 1990
A:Title: Regulatory phosphorylation of serine-15 in maize phosphoenolpyruvate carboxylas
A:Reference number: SI3889; MUID:91112741; PMID:2148863
A:Accession: SI3889
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <JIA>
A:Cross-references: UNIPROT:Q43267; UNIPROT:Q41197; UNIPARC:UPI000017B168
C:Superfamily: phosphoenolpyruvate carboxylase
C:Keywords: carbon-carbon lyase; carboxy-lyase

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 33.3%; Pred. No. 2.8e+05;
Matches 1; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 7 HNV 9
||
Db 2 HSI 4

RESULT 46

S70332
endosperm protein, 10K - rye (fragment)
C:Species: Secale cereale (rye)
C:Date: 19-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 17-Apr-1998
C:Accession: S70332
R:Rocher, A.; Calero, M.; Soriano, F.; Mendez, E.
Biochim. Biophys. Acta 1295, 13-22, 1996
A:Title: Identification of major rye secalins as coeliac immunoreactive proteins.
A:Reference number: S70327; MUID:96283789; PMID:8679669
A:Accession: S70332
A:Status: preliminary
A:Molecule type: protein
A:Residues: 1-9 <ROC>
A:Cross-references: UNIPARC:UPI000017B132

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 TAP 4
||
Db 1 TGP 3

RESULT 47

PT0247
Ig heavy chain CRD3 region (clone 2-106A) - human (fragment)

C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
C;Accession: PT0247
R;Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and J
A;Reference number: PT0222; MUID:91108337; PMID:1899102
A;Accession: PT0247
A;Molecule type: DNA
A;Residues: 1-9 <YAM>
A;Cross-references: UNIPARC:UPI000017C1E6
A;Experimental source: B lymphocyte
C;Keywords: heterotetramer; immunoglobulin

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2 TAP 4
|||
Db 2 SAP 4

RESULT 48
PL0139
carbon-monoxide dehydrogenase (EC 1.2.99.2) large chain - Pseudomonas carboxydoflava (fr
C;Species: Pseudomonas carboxydoflava
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 09-Jul-2004
C;Accession: PL0139
R;Kraut, M.; Hugendieck, I.; Herwig, S.; Meyer, O.
Arch. Microbiol. 152, 335-341, 1989
A;Title: Homology and distribution of CO dehydrogenase structural genes in carboxydotrop
A;Reference number: PL0138; MUID:90055678; PMID:2818128
A;Accession: PL0139
A;Molecule type: protein
A;Residues: 1-9 <KRA>
A;Cross-references: UNIPROT:P1913; UNIPARC:UPI000017A976
A;Note: 2-Met is also found
C;Comment: Carbon-monoxide dehydrogenase consists of three polypeptide chains: large, me
C;Keywords: oxidoreductase

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 5 PVHN 8
|||
Db 4 PVQD 7

RESULT 49
SI0920
venom protein HR-3 - oriental hornet (fragment)
C;Species: Vespa orientalis (oriental hornet)
C;Date: 29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change 09-Jul-2004
C;Accession: SI0920
R;Tsuchibaev, M.U.; Akhmedova, N.U.; Kazakov, I.; Korneev, A.S.; Gagel'gans, A.I.
Biochemistry (N.Y.) 53, 183-190, 1988
A;Title: Low-molecular-weight peptides of venom of the giant hornet Vespa orientalis. S
A;Reference number: S06445
A;Accession: SI0920
A;Molecule type: protein
A;Residues: 1-9 <TUI>
A;Cross-references: UNIPROT:Q7M471; UNIPARC:UPI000017BF07
C;Keywords: venom

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 VH 7
|||
Db 3 VH 4

RESULT 50

A56029
N-methylpurine DNA glycosylase - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 19-Jan-1996 #sequence_revision 19-Jan-1996 #text_change 09-Jul-2004
C;Accession: A56029
R;ROY, R.; Brooks, C.; Mitra, S.
Biochemistry 33, 15131-15140, 1994
A;Title: Purification and biochemical characterization of recombinant N-methylpurine-DNA
A;Reference number: A56029; MUID:95092772; PMID:7999773
A;Accession: A56029
A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-9 <ROY>
A;Cross-references: UNIPROT:Q7M0H1; UNIPARC:UPI000017C703

Query Match 24.5%; Score 12; DB 2; Length 9;
Best Local Similarity 66.7%; Pred. No. 2.8e+05;
Matches 2; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 7 HNV 9
|||
Db 3 HEV 5

Search completed: February 24, 2006, 10:18:41
Job time : 42 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Bioceleration Ltd.
OM protein - protein search, using sw model
Run on: February 24, 2006, 10:10:41 ; Search time 181 Seconds
(without alignments)
21.848 Million cell updates/sec

Title: US-10-019-513-1
Perfect score: 49
Sequence: 1 STAPPVHV 9
Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5
Searched: 2443163 seqs, 439378781 residues
Total number of hits satisfying chosen parameters: 401289
Minimum DB seq length: 0
Maximum DB seq length: 9
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : A_Geneseq_21:.*
1: Geneseqp1980s:.*
2: Geneseqp1990s:.*
3: Geneseqp2000s:.*
4: Geneseqp2001s:.*
5: Geneseqp2002s:.*
6: Geneseqp2003s:.*
7: Geneseqp2003bs:.*
8: Geneseqp2004s:.*
9: Geneseqp2005s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	49	100.0	9	AAB11114	Aab11114 Human MUC
2	49	100.0	9	ABG79089	Abg79089 Human MUC
3	49	100.0	9	ADA50588	Ada50588 Mucin 1 (
4	49	100.0	9	ADG89655	Adg89655 Class I H
5	49	100.0	9	ADG20359	Adg20359 Antigenic
6	49	100.0	9	ADU49630	Adu49630 Human MUC
7	49	100.0	9	ADX08605	Adx08605 Class I H
8	49	100.0	9	ADY51475	Ady51475 HLA-A2 pe
9	39	79.6	9	ADW72715	Adw72715 Mucin pep
10	39	79.6	9	AAW78844	Aaw78844 MUC-1 pro
11	39	79.6	9	AAW72715	Aaw72715 Mucin pep
12	39	79.6	9	AAW72715	Aaw72715 Mucin pep
13	39	79.6	9	AAW67583	Aaw67583 T-cell ac
14	39	79.6	9	AAW33656	Aaw33656 MHC class
15	39	79.6	9	AAE09540	Aae09540 Human HLA
16	39	79.6	9	AAE09540	Aae09540 MHC class
17	39	79.6	9	AAE09540	Aae09540 MHC class
18	39	79.6	9	AAE09540	Aae09540 MHC class
19	39	79.6	9	AAE09540	Aae09540 MHC class
20	39	79.6	9	AAE09540	Aae09540 MHC class
21	39	79.6	9	AAE09540	Aae09540 MHC class
22	39	79.6	9	AAE09540	Aae09540 MHC class
23	39	79.6	9	AAE09540	Aae09540 MHC class
24	39	79.6	9	AAE09540	Aae09540 MHC class

25	39	79.6	9	ADU49634	Adu49634 Human MUC
26	39	79.6	9	ADY08604	Ady08604 Class I H
27	39	79.6	9	ADY26204	Ady26204 MHC Class
28	39	79.6	9	ADZ66315	Adz66315 MUC1 repe
29	36	73.5	9	AAW67603	Aaw67603 Human MUC
30	35	71.4	9	AAW68012	Aaw68012 Mucin pep
31	35	71.4	9	AAW68014	Aaw68014 Mucin pep
32	35	71.4	9	AAW68011	Aaw68011 Mucin pep
33	35	71.4	9	AAW72714	Aaw72714 Mucin pep
34	35	71.4	9	AAW72713	Aaw72713 Mucin pep
35	35	71.4	9	AAW72716	Aaw72716 Mucin pep
36	35	71.4	9	AAE05534	Aae05534 Human muc
37	35	71.4	9	ADW72718	Adw72718 Genetic v
38	35	71.4	9	ADW72717	Adw72717 Genetic v
39	35	71.4	9	ADW72716	Adw72716 Genetic v
40	32	65.3	8	ABG73822	Abg73822 MUC1 asso
41	31.5	64.3	8	AAE26804	Aae26804 Human HLA
42	31.5	64.3	8	AAE26804	Aae26804 Human HLA
43	31	63.3	6	AAW38247	Aaw38247 Extended
44	31	63.3	6	AAW38247	Aaw38247 Extended
45	31	63.3	6	AAW38247	Aaw38247 Extended
46	31	63.3	6	AAW38247	Aaw38247 Extended
47	31	63.3	6	AAW38247	Aaw38247 Extended
48	31	63.3	6	AAW38247	Aaw38247 Extended
49	31	63.3	6	AAW38247	Aaw38247 Extended
50	30	61.2	8	AAW38247	Aaw38247 Extended
51	30	61.2	8	AAW38247	Aaw38247 Extended
52	30	61.2	8	AAW38247	Aaw38247 Extended
53	30	61.2	8	AAW38247	Aaw38247 Extended
54	30	61.2	8	AAW38247	Aaw38247 Extended
55	30	61.2	8	AAW38247	Aaw38247 Extended
56	30	61.2	8	AAW38247	Aaw38247 Extended
57	30	61.2	8	AAW38247	Aaw38247 Extended
58	30	61.2	8	AAW38247	Aaw38247 Extended
59	30	61.2	8	AAW38247	Aaw38247 Extended
60	30	61.2	8	AAW38247	Aaw38247 Extended
61	30	61.2	8	AAW38247	Aaw38247 Extended
62	30	61.2	8	AAW38247	Aaw38247 Extended
63	30	61.2	8	AAW38247	Aaw38247 Extended
64	30	61.2	8	AAW38247	Aaw38247 Extended
65	30	61.2	8	AAW38247	Aaw38247 Extended
66	30	61.2	8	AAW38247	Aaw38247 Extended
67	30	61.2	8	AAW38247	Aaw38247 Extended
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69	30	61.2	8	AAW38247	Aaw38247 Extended
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71	30	61.2	8	AAW38247	Aaw38247 Extended
72	28	57.1	9	AAW38247	Aaw38247 Extended
73	27	55.1	6	AAW38247	Aaw38247 Extended
74	27	55.1	6	AAW38247	Aaw38247 Extended
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78	27	55.1	6	AAW38247	Aaw38247 Extended
79	27	55.1	6	AAW38247	Aaw38247 Extended
80	27	55.1	6	AAW38247	Aaw38247 Extended
81	26	53.1	6	AAW38247	Aaw38247 Extended
82	26	53.1	6	AAW38247	Aaw38247 Extended
83	26	53.1	6	AAW38247	Aaw38247 Extended
84	26	53.1	6	AAW38247	Aaw38247 Extended
85	26	53.1	6	AAW38247	Aaw38247 Extended
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88	26	53.1	6	AAW38247	Aaw38247 Extended
89	26	53.1	6	AAW38247	Aaw38247 Extended
90	26	53.1	6	AAW38247	Aaw38247 Extended
91	26	53.1	6	AAW38247	Aaw38247 Extended
92	26	53.1	6	AAW38247	Aaw38247 Extended
93	26	53.1	6	AAW38247	Aaw38247 Extended
94	26	53.1	6	AAW38247	Aaw38247 Extended
95	26	53.1	6	AAW38247	Aaw38247 Extended
96	25	51.0	8	AAW38247	Aaw38247 Extended
97	25	51.0	8	AAW38247	Aaw38247 Extended

98	25	51.0	9	4	AAm22285	AAm22285	HIV pepti	171	24	49.0	9	8	AD575348	Human C35
99	25	51.0	9	4	AAm22287	AAm22287	HIV pepti	172	24	49.0	9	9	ADV13361	Human pho
100	25	51.0	9	4	AAU26574	AAU26574	Human Leu	173	23	49.0	9	9	ADx83757	C35 human
101	25	51.0	9	7	ABO07325	ABO07325	Human Muc	174	23	46.9	4	7	ADC28247	Stain car
102	25	51.0	9	7	ABW00337	ABW00337	Tumour-as	175	23	46.9	4	7	ADW37010	HLA bindi
103	25	51.0	9	8	AD112136	AD112136	Human BFA	176	23	46.9	4	9	ADY56624	Carotenoi
104	25	51.0	9	8	ADT74519	ADT74519	Human RSV	177	23	46.9	5	5	ABP54763	Peptide i
105	25	51.0	9	8	ADU99307	ADU99307	BFA4 tumo	178	23	46.9	5	6	AAE34886	HIV-1 Gag
106	24	49.0	6	2	AAU95608	AAU95608	Diabetoge	179	23	46.9	5	6	ABP96510	HIV GAG p
107	24	49.0	7	2	AAU96117	AAU96117	Peptide p	180	23	46.9	5	6	ABR2402	HIV Gag p
108	24	49.0	7	7	ABR83353	ABR83353	Viral rel	181	23	46.9	5	6	ADJ92025	Transport
109	24	49.0	7	7	ABR83358	ABR83358	Viral rel	182	23	46.9	6	2	AAW25661	Conserved
110	24	49.0	7	7	ADC28005	ADC28005	Synthetic	183	23	46.9	6	2	AAW64516	Neurotoxi
111	24	49.0	7	9	ADY56374	ADY56374	Carotenoi	184	23	46.9	6	5	AAE26893	Decoy pep
112	24	49.0	8	2	AAU35856	AAU35856	Hepatitis	185	23	46.9	6	5	AAU99476	BetaAP-se
113	24	49.0	8	4	ABP20620	ABP20620	HIV A03 m	186	23	46.9	6	5	ABP54765	Peptide i
114	24	49.0	8	4	ABP20375	ABP20375	HIV A03 m	187	23	46.9	6	5	ABP96512	HIV GAG p
115	24	49.0	8	4	ABP17801	ABP17801	HIV B58 s	188	23	46.9	6	6	ABR43641	Mouse CLA
116	24	49.0	8	4	ABP17900	ABP17900	HIV B58 s	189	23	46.9	6	6	ABR82404	HIV Gag p
117	24	49.0	8	8	ADR05420	ADR05420	Savinase	190	23	46.9	6	7	ADJ92027	Transport
118	24	49.0	9	2	AAU44271	AAU44271	Residues	191	23	46.9	7	5	ABP54771	Peptide i
119	24	49.0	9	2	AAU53611	AAU53611	Optoid pe	192	23	46.9	7	6	ABP96518	HIV GAG p
120	24	49.0	9	2	AAU97535	AAU97535	Antigenic	193	23	46.9	7	6	AAE32747	Human imm
121	24	49.0	9	2	AAU40199	AAU40199	Amino aci	194	23	46.9	7	6	AAE32746	Human imm
122	24	49.0	9	2	AAU40195	AAU40195	Amino aci	195	23	46.9	7	6	ABR82410	HIV Gag p
123	24	49.0	9	2	AAU53376	AAU53376	p53 epito	196	23	46.9	7	7	ABR83356	Viral rel
124	24	49.0	9	2	AAU53372	AAU53372	p53 epito	197	23	46.9	7	7	ABR83355	Viral rel
125	24	49.0	9	2	AAU26711	AAU26711	HLA-B7 b1	198	23	46.9	7	7	ADB79456	Parapoxvi
126	24	49.0	9	2	AAU26715	AAU26715	HLA-B8 b1	199	23	46.9	7	7	ADB79721	Parapoxvi
127	24	49.0	9	3	AAU26349	AAU26349	Human CAS	200	23	46.9	7	7	ADE11627	Ebola vir
128	24	49.0	9	4	AAU26906	AAU26906	Human Leu	201	23	46.9	7	7	ADE77779	Synthetic
129	24	49.0	9	4	ABU13019	ABU13019	Human C35	202	23	46.9	7	7	AAU23605	Colon tum
130	24	49.0	9	4	ABU13212	ABU13212	Human C35	203	23	46.9	7	7	ADJ92033	Transport
131	24	49.0	9	4	ABU14174	ABU14174	Human C35	204	23	46.9	7	8	ADP69978	Hair bind
132	24	49.0	9	4	ABU14270	ABU14270	Human C35	205	23	46.9	7	8	ADP74865	Parapoxvi
133	24	49.0	9	4	ABU13147	ABU13147	Human C35	206	23	46.9	7	8	ADP75139	Parapoxvi
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135	24	49.0	9	4	ABU12592	ABU12592	Human C35	208	23	46.9	7	8	ADU69115	Gag pepti
136	24	49.0	9	4	ABU14350	ABU14350	Human C35	209	23	46.9	7	9	ADY99994	Gag prote
137	24	49.0	9	4	ABU12497	ABU12497	Human C35	210	23	46.9	7	9	ADY55676	Hair-bind
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139	24	49.0	9	4	ABU14015	ABU14015	Human C35	212	23	46.9	8	2	AAU77556	HIV(B35) -
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541	23	46.9	9	8	ADK69322	Adk69322 Epitope 1	614	22	44.9	7	5	ABB83464	Tissue In
542	23	46.9	9	8	ADK68752	Adk68752 Epitope 1	615	22	44.9	7	5	ABB83463	Tissue In
543	23	46.9	9	8	ADK69541	Adk69541 Epitope 1	616	22	44.9	7	5	ABB73233	Src homol
544	23	46.9	9	8	ADK69053	Adk69053 Epitope 1	617	22	44.9	7	5	ABP74997	Proteome
545	23	46.9	9	8	ADJ83647	Adj83647 Murine WT	618	22	44.9	7	6	AAO23192	Template-
546	23	46.9	9	8	ADJ83573	Adj83573 Human WT1	619	22	44.9	7	7	ADB79448	Parapoxvi
547	23	46.9	9	8	ADJ83531	Adj83531 Human WT1	620	22	44.9	7	7	ADJ73387	SH3 antag
548	23	46.9	9	8	ADLS7419	Adl57419 Human WT-	621	22	44.9	7	8	ADJ53021	CH1 delet
549	23	46.9	9	8	ADLS7461	Adl57461 Human WT-	622	22	44.9	7	8	ADJ51982	CH1 delet
550	23	46.9	9	8	ADLS7535	Adl57535 Mouse WT-	623	22	44.9	7	8	ADP74890	Parapoxvi
551	23	46.9	9	8	ADM73079	Adm73079 Human MAG	624	22	44.9	7	8	ADP80384	Human HLA
552	23	46.9	9	8	ADM73090	Adm73090 Human MAG	625	22	44.9	8	2	AAR84745	DYN domai
553	23	46.9	9	8	ADM73081	Adm73081 Human MAG	626	22	44.9	8	2	AAR97521	Antigenic
554	23	46.9	9	8	ADM73088	Adm73088 Human MAG	627	22	44.9	8	2	AAY40611	Al deriva
555	23	46.9	9	8	ADM97316	Adm97316 Cytotoxic	628	22	44.9	8	3	AAB29950	Scaffold
556	23	46.9	9	8	ADO09016	Ado09016 Human WT1	629	22	44.9	8	4	AAU26888	Human Leu
557	23	46.9	9	8	ADO09090	Ado09090 Mouse WT1	630	22	44.9	8	4	ABP11520	HIV A01 s
558	23	46.9	9	8	ADO08974	Ado08974 Human WT1	631	22	44.9	8	4	ABP11954	HIV A02 s
559	23	46.9	9	8	ADM63697	Adm63697 HLA bindi	632	22	44.9	8	4	AAG89703	p53 epitope
560	23	46.9	9	8	ADM63696	Adm63696 HLA bindi	633	22	44.9	8	4	AAG89580	p53 epitope
561	23	46.9	9	8	ADO24142	Ado24142 HIV epitope	634	22	44.9	8	4	AAG89526	p53 epitope
562	23	46.9	9	8	ADO23858	Ado23858 HBV pepti	635	22	44.9	8	9	ADVI2432	Human pho
563	23	46.9	9	8	ADO30651	Ado30651 Human imm	636	22	44.9	8	9	AEA14125	VEGF rela
564	23	46.9	9	8	ADO11183	Ado11183 Synthetic	637	22	44.9	9	2	AAR44262	Residues
565	23	46.9	9	8	ADO11403	Ado11403 Human imm	638	22	44.9	9	2	AAR44260	Residues
566	23	46.9	9	8	ADQ10851	Adq10851 Human imm	639	22	44.9	9	2	AAR59117	Peptide f
567	23	46.9	9	8	ADQ10575	Adq10575 Human imm	640	22	44.9	9	2	AAR84746	Dynamin r
568	23	46.9	9	8	ADQ10550	Adq10550 Hepatitis	641	22	44.9	9	2	AAR89165	Peptide P
569	23	46.9	9	8	ADP90883	Adp90883 HIV-1 ant	642	22	44.9	9	2	AAR97533	Antigenic
570	23	46.9	9	8	ADQ79600	Adq79600 Human Wil	643	22	44.9	9	2	AAR97510	Cytotoxic
571	23	46.9	9	8	ADR12458	Adr12458 Anti-canc	644	22	44.9	9	2	AAR97505	Cytotoxic
572	23	46.9	9	8	ADR69471	Adr69471 Novel hyb	645	22	44.9	9	2	AAW39617	Human p53
573	23	46.9	9	8	ADR69770	Adr69770 Novel hyb	646	22	44.9	9	2	AAW71346	Glycolipi
574	23	46.9	9	8	ADP79842	Adp79842 Human HLA	647	22	44.9	9	2	AAW46008	Peptide #
575	23	46.9	9	8	ADP79841	Adp79841 Human HLA	648	22	44.9	9	2	AAW78858	p53 prote
576	23	46.9	9	8	ADP79843	Adp79843 Human HLA	649	22	44.9	9	2	AAW78855	p53 prote
577	23	46.9	9	8	ADR47065	Adr47065 Control H	650	22	44.9	9	2	AAW99358	Glycosyla
578	23	46.9	9	8	ADR47127	Adr47127 Control H	651	22	44.9	9	2	AAW40182	Amino aci
579	23	46.9	9	8	ADS81055	Ads81055 Tumour-as	652	22	44.9	9	2	AAW40185	Amino aci
580	23	46.9	9	8	ADS81663	Ads81663 Tumour-as	653	22	44.9	9	2	AAW40202	Amino aci
581	23	46.9	9	8	ADS81883	Ads81883 Tumour-as	654	22	44.9	9	2	AAW47768	Immunogen
582	23	46.9	9	8	ADS81030	Ads81030 Tumour-as	655	22	44.9	9	2	AAW09158	Peptide s
583	23	46.9	9	8	ADS81331	Ads81331 Tumour-as	656	22	44.9	9	2	AAW53359	p53 epitope
584	23	46.9	9	8	ADT74504	Adt74504 Human RSV	657	22	44.9	9	2	AAW53379	p53 epitope
585	23	46.9	9	8	ADU08007	Adu08007 Viral der	658	22	44.9	9	2	AAW53362	p53 epitope
586	23	46.9	9	8	ADT90877	Adt90877 Human imm	659	22	44.9	9	2	AAW26701	HLA-A2 bi
587	23	46.9	9	9	ADU47985	Adu47985 HLA A*020	660	22	44.9	9	2	AAW26698	HLA-A2 bi
588	23	46.9	9	9	ADV91825	Adv91825 HIV pol A	661	22	44.9	9	3	AAW33667	MHC class
589	23	46.9	9	9	ADW11940	Adw11940 Human CDI	662	22	44.9	9	3	AAW33670	MHC class
590	23	46.9	9	9	ADX39187	Adx39187 Peptide e	663	22	44.9	9	3	AAW79560	Human tum
591	23	46.9	9	9	ADX39186	Adx39186 Peptide e	664	22	44.9	9	3	AAW95884	Human MHC
592	23	46.9	9	9	ADX39190	Adx39190 Peptide e	665	22	44.9	9	3	AAW54186	HLA bindi
593	23	46.9	9	9	ADX39189	Adx39189 Peptide e	666	22	44.9	9	4	AAW22188	HIV pepti
594	23	46.9	9	9	ADX39179	Adx39179 Peptide e	667	22	44.9	9	4	AAW23294	HIV pepti
595	23	46.9	9	9	ADX39192	Adx39192 Peptide e	668	22	44.9	9	4	AAW22185	HIV pepti
596	23	46.9	9	9	ADX08751	Adx08751 HIV-CTL p	669	22	44.9	9	4	AAW95913	MHC class
597	23	46.9	9	9	ADZ37545	Adz37545 Human kin	670	22	44.9	9	4	AAW95916	MHC class
598	23	46.9	9	9	ADZ40383	Adz40383 Junctiona	671	22	44.9	9	4	AAW93763	Human p53
599	23	46.9	9	9	ADZ40567	Adz40567 Exemplary	672	22	44.9	9	4	AAW93766	Human p53
600	23	46.9	9	9	ADZ40546	Adz40546 Human leu	673	22	44.9	9	4	AAE02675	Human p53
601	23	46.9	9	9	ADZ40644	Adz40644 Multi-epi	674	22	44.9	9	4	AAE02674	Human p53
602	23	46.9	9	9	ADZ50444	Adz50444 Y. peatis	675	22	44.9	9	4	AAU06365	Human p53
603	23	46.9	9	9	ADZ56741	Adz56741 Cytotoxic	676	22	44.9	9	4	AAE00464	Human tum
604	23	46.9	9	9	AEA39410	Aea39410 Human imm	677	22	44.9	9	4	AAE00465	Human tum
605	23	46.9	9	9	AEB26702	Aeb26702 Human imm	678	22	44.9	9	4	AAU26903	Human Leu
606	22	44.9	4	2	AAR76701	Aar76701 N-termina	679	22	44.9	9	4	AAU26573	Human Leu
607	22	44.9	5	2	AAW10818	Aaw10818 Hepatitis	680	22	44.9	9	4	ABB13888	Human C35
608	22	44.9	7	2	AAR84747	Aar84747 GST-dynam	681	22	44.9	9	4	ABB13605	Human C35

682	22	44.9	9	4	ABBI13868	Abbl13868 Human C35	755	22	44.9	9	7	ADW57337	Adw57337 Human 98P
683	22	44.9	9	4	ABP20245	ABP20245 HIV A03 m	756	22	44.9	9	7	ADW59146	Adw59146 Human 98P
684	22	44.9	9	4	ABP18359	ABP18359 HIV B58 s	757	22	44.9	9	7	ADW59173	Adw59173 Human 98P
685	22	44.9	9	4	ABP14097	ABP14097 HIV A02 s	758	22	44.9	9	8	ADE97579	Ade97579 Immunogen
686	22	44.9	9	4	AAG89388	Ag89388 p53 DR su	759	22	44.9	9	8	ADJ36383	Adj36383 p53 prote
687	22	44.9	9	4	AG89521	Ag89521 p53 epit	760	22	44.9	9	8	ADJ36384	Adj36384 p53 prote
688	22	44.9	9	4	AG89548	Ag89548 p53 epit	761	22	44.9	9	8	ADK05363	Adk05363 Hepatitis
689	22	44.9	9	4	AG89569	Ag89569 p53 epit	762	22	44.9	9	8	ADK05386	Adk05386 Hepatitis
690	22	44.9	9	4	AG89522	Ag89522 p53 epit	763	22	44.9	9	8	ADK03867	Adk03867 Hepatitis
691	22	44.9	9	4	AG89715	Ag89715 p53 epit	764	22	44.9	9	8	ADK05382	Adk05382 Hepatitis
692	22	44.9	9	4	AG89415	Ag89415 p53 DR su	765	22	44.9	9	8	ADK05385	Adk05385 Hepatitis
693	22	44.9	9	4	AG89431	Ag89431 p53 DR su	766	22	44.9	9	8	ADK06330	Adk06330 Hepatitis
694	22	44.9	9	4	AG89493	Ag89493 p53 DR 3a	767	22	44.9	9	8	ADK03880	Adk03880 Hepatitis
695	22	44.9	9	4	AG89691	Ag89691 p53 epit	768	22	44.9	9	8	ADK06255	Adk06255 Hepatitis
696	22	44.9	9	4	AG89416	Ag89416 p53 DR su	769	22	44.9	9	8	ADM57836	Adm57836 Human PB
697	22	44.9	9	4	AG89600	Ag89600 p53 epit	770	22	44.9	9	8	ADN91673	Adn91673 Human 202
698	22	44.9	9	5	AAW43929	Aaw43929 Human D40	771	22	44.9	9	8	ADN91350	Adn91350 Human 202
699	22	44.9	9	5	ABP47362	ABP47362 N. mening	772	22	44.9	9	8	ADN92445	Adn92445 Human 202
700	22	44.9	9	5	ABP47438	ABP47438 N. mening	773	22	44.9	9	8	ADN90134	Adn90134 Human 202
701	22	44.9	9	5	AAU95859	Aau95859 Immunogen	774	22	44.9	9	8	ADN93224	Adn93224 Human 202
702	22	44.9	9	5	ABU57363	Abu57363 p53 pepti	775	22	44.9	9	8	ADN92965	Adn92965 Human 202
703	22	44.9	9	6	ABR56430	ABR56430 p53 prote	776	22	44.9	9	8	ADW75042	Adw75042 p53 prote
704	22	44.9	9	6	ABR56429	ABR56429 p53 prote	777	22	44.9	9	8	ADV32789	Adv32789 Human 109
705	22	44.9	9	6	ABR67415	ABR67415 Human act	778	22	44.9	9	8	ADV32455	Adv32455 Human 109
706	22	44.9	9	6	ABR21583	ABR21583 Human can	779	22	44.9	9	8	ADV28003	Adv28003 Human 109
707	22	44.9	9	6	ABR22987	ABR22987 Human can	780	22	44.9	9	8	ADV32648	Adv32648 Human 109
708	22	44.9	9	6	ABR20186	ABR20186 Human can	781	22	44.9	9	8	ADV32927	Adv32927 Human 109
709	22	44.9	9	6	ABJ64631	ABJ64631 184P1E2-r	782	22	44.9	9	8	ADV32822	Adv32822 Human 109
710	22	44.9	9	6	ABJ61567	ABJ61567 184P1E2-r	783	22	44.9	9	8	ADU87393	Adu87393 Human tum
711	22	44.9	9	6	ABJ61139	ABJ61139 184P1E2-r	784	22	44.9	9	8	ADU87394	Adu87394 Human tum
712	22	44.9	9	6	ABJ65437	ABJ65437 184P1E2-r	785	22	44.9	9	9	ADU47996	Adu47996 Human p53
713	22	44.9	9	6	ABJ58854	ABJ58854 184P1E2-r	786	22	44.9	9	9	ADW13795	Adw13795 Human tum
714	22	44.9	9	6	ABJ63571	ABJ63571 184P1E2-r	787	22	44.9	9	9	ADW13796	Adw13796 Human tum
715	22	44.9	9	6	ABJ64076	ABJ64076 184P1E2-r	788	22	44.9	9	9	ADY26215	Ady26215 MHC Class
716	22	44.9	9	6	ABJ59473	ABJ59473 184P1E2-r	789	22	44.9	9	9	ADY26218	Ady26218 MHC Class
717	22	44.9	9	6	ABJ60291	ABJ60291 184P1E2-r	790	22	44.9	9	9	ADZ50921	Adz50921 Y. pestis
718	22	44.9	9	6	ABJ62708	ABJ62708 184P1E2-r	791	22	44.9	9	9	ADZ56791	Adz56791 Cytotoxic
719	22	44.9	9	6	ABJ62438	ABJ62438 184P1E2-r	792	22	44.9	9	9	ADZ56688	Adz56688 Cytotoxic
720	22	44.9	9	6	ABR44530	ABR44530 p53 prote	793	22	44.9	9	9	ABE30757	Ab30757 p53 anti
721	22	44.9	9	6	ABR44531	ABR44531 p53 prote	794	21	42.9	4	5	ABG32439	ABg32439 Antiviral
722	22	44.9	9	6	ABU96619	ABU96619 MHC class	795	21	42.9	4	6	AAE35851	Aae35851 Smac tetr
723	22	44.9	9	6	ABU96622	ABU96622 MHC class	796	21	42.9	4	8	ADR38576	Adr38576 Inhibitor
724	22	44.9	9	6	ABU63002	ABU63002 Human p53	797	21	42.9	5	8	ADR90645	Adr90645 Human thr
725	22	44.9	9	6	ABU63003	ABU63003 Human p53	798	21	42.9	6	2	AAR76135	Aar76135 hML(1-6)
726	22	44.9	9	7	ADK23941	ADK23941 Human 98P	799	21	42.9	6	2	AAW73038	Aaw73038 Helicobac
727	22	44.9	9	7	ADK24848	ADK24848 Human 98P	800	21	42.9	6	9	ADZ74361	Adz74361 Human col
728	22	44.9	9	7	ADK24838	ADK24838 Human 98P	801	21	42.9	7	2	AAW76171	Aaw76171 Met-TPO(1
729	22	44.9	9	7	ADK23937	ADK23937 Human 98P	802	21	42.9	7	2	AAW76132	Aaw76132 Met-hML(1
730	22	44.9	9	7	ADW31379	Adw31379 HLA bindi	803	21	42.9	7	2	AAW76958	Aaw76958 Fusion im
731	22	44.9	9	7	ADW5662	ADW5662 Human 98P	804	21	42.9	7	8	ADS14008	Ad14008 Thrombin
732	22	44.9	9	7	ADM60033	ADM60033 Human 98P	805	21	42.9	7	8	ADS14009	Ad14009 Thrombin
733	22	44.9	9	7	ADM60045	ADM60045 Human 98P	806	21	42.9	7	8	ADT40999	Adt40999 hSARS vir
734	22	44.9	9	7	ADM55973	ADM55973 Human 98P	807	21	42.9	7	8	ADS80414	Ad80414 SARS viru
735	22	44.9	9	7	ADM60367	ADM60367 Human 98P	808	21	42.9	7	8	ADT38529	Adt38529 hSARS vir
736	22	44.9	9	7	ADM61302	ADM61302 Human 98P	809	21	42.9	7	8	ABY03567	AbY03567 SARS 1006
737	22	44.9	9	7	ADM58015	ADM58015 Human 98P	810	21	42.9	8	4	ABY26899	Abu26899 Human Leu
738	22	44.9	9	7	ADM55320	ADM55320 Human 98P	811	21	42.9	8	4	ABP12009	Abp12009 HIV A02 s
739	22	44.9	9	7	ADM56651	ADM56651 Human 98P	812	21	42.9	8	4	ABP17719	Abp17719 HIV B58 s
740	22	44.9	9	7	ADM57309	ADM57309 Human 98P	813	21	42.9	8	4	ABP17640	Abp17640 HIV B58 s
741	22	44.9	9	7	ADM57382	ADM57382 Human 98P	814	21	42.9	8	4	ABP17667	Abp17667 HIV B58 s
742	22	44.9	9	7	ADM60682	ADM60682 Human 98P	815	21	42.9	8	4	ABP12008	Abp12008 HIV A02 s
743	22	44.9	9	7	ADM55315	ADM55315 Human 98P	816	21	42.9	8	4	ABP12010	Abp12010 HIV A02 s
744	22	44.9	9	7	ADM57376	ADM57376 Human 98P	817	21	42.9	8	7	ABR62975	ABr62975 RG2 gliom
745	22	44.9	9	7	ADM61115	ADM61115 Human 98P	818	21	42.9	8	8	ADK01860	Adk01860 Hepatitis
746	22	44.9	9	7	ADM56034	ADM56034 Human 98P	819	21	42.9	8	8	ADR71476	Adr71476 Antigenic
747	22	44.9	9	7	ADM57964	ADM57964 Human 98P	820	21	42.9	8	8	ADR71569	Adr71569 SARS viru
748	22	44.9	9	7	ADM61301	ADM61301 Human 98P	821	21	42.9	8	8	ADR71567	Adr71567 SARS viru
749	22	44.9	9	7	ADM57993	ADM57993 Human 98P	822	21	42.9	8	8	ADR71568	Adr71568 SARS viru
750	22	44.9	9	7	ADM60046	ADM60046 Human 98P	823	21	42.9	8	8	ADU08135	Adu08135 Heat shoc
751	22	44.9	9	7	ADM55366	ADM55366 Human 98P	824	21	42.9	8	8	ADU04098	Adu04098 HTLV-I En
752	22	44.9	9	7	ADM59858	ADM59858 Human 98P	825	21	42.9	8	8	ADU04105	Adu04105 HTLV-I En
753	22	44.9	9	7	ADM60040	ADM60040 Human 98P	826	21	42.9	8	9	ADV12166	Adv12166 Human pho
754	22	44.9	9	7	ADM60875	ADM60875 Human 98P	827	21	42.9	8	9	ADY95906	Ady95906 SARS pept

974 21 42.9 9 6 ABR21390 Human can
975 21 42.9 9 6 ABR24188 Human can
976 21 42.9 9 6 ABR22649 Human can
977 21 42.9 9 6 ABR23772 Human can
978 21 42.9 9 6 ABR20975 Human can
979 21 42.9 9 6 ABR24056 Human can
980 21 42.9 9 7 ADB67360 Human WT1
981 21 42.9 9 7 ADB67373 Human WT1
982 21 42.9 9 7 ADB67492 Mouse WT1
983 21 42.9 9 7 ADB67358 Human WT1
984 21 42.9 9 7 ADB67359 Human WT1
985 21 42.9 9 7 ADBW01531 Drosophila
986 21 42.9 9 7 ADBW01531 Drosophila
987 21 42.9 9 7 ADI07230 101P3A11
988 21 42.9 9 7 ADI08220 101P3A11
989 21 42.9 9 7 ADI08415 101P3A11
990 21 42.9 9 7 ADI07833 101P3A11
991 21 42.9 9 7 ADI08115 101P3A11
992 21 42.9 9 7 ADI08715 101P3A11
993 21 42.9 9 7 ADI05857 101P3A11
994 21 42.9 9 7 ADI06461 101P3A11
995 21 42.9 9 7 ADI08691 101P3A11
996 21 42.9 9 7 ADI05891 101P3A11
997 21 42.9 9 7 ADI07571 101P3A11
998 21 42.9 9 7 ADI06976 101P3A11
999 21 42.9 9 7 ADI07989 101P3A11
1000 21 42.9 9 9 ADZ89103 Immunogen

ALIGNMENTS

RESULT 1
AAB11114
ID AAB11114 standard; peptide; 9 AA.
XX
AC AAB11114;
XX
XX
DT 16-FEB-2001 (first entry)
XX
XX Human MUC-1 protein fragment SEQ ID NO 1.
DE
DE Human; MUC-1; tumor; HLA-A2 restricted immune reaction; treatment;
KW human leukocyte antigen; gene therapy; antigen-presenting cell.
KW
XX Homo sapiens.
XX
XX DE19917195-A1.
XX
XX 19-OCT-2000.
XX
XX 16-APR-1999; 99DE-01017195.
XX
XX 16-APR-1999; 99DE-01017195.
XX
XX (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.
XX
XX Brossart P, Stevanovic S, Brugger W, Kanz L, Rammensee HG;
XX WPI; 2001-032872/05.
XX
XX New peptide derived from the MUC-1 tumor marker, used to induce a
PT cytotoxic T cell response for treatment or prevention of tumors.
XX
XX Claim 1; Page 6; 8pp; German.



XX This invention describes a novel peptide (I) derived from the MUC-1 gene
CC which is able to induce an HLA (human leukocyte antigen)-A2-restricted
CC immune reaction against tumor cells. (I) or the nucleic acid (II)
CC encoding (I), are used to induce an immune response against tumor cells,
CC so are useful for treatment or prevention of tumors, in conjunction with
CC other tumor therapies. In particular (II) is used in gene therapy or for
CC in vitro transfection or transformation of cells (particularly antigen-

CC presenting cells, optionally in vivo), for expression of (I). (I) has a
CC high binding capacity for HLA-A2 and can reverse the usual suppression of
CC the immune response associated with tumor cells. By introducing the
CC nucleic acid that encodes (I) into an antigen-presenting cell in vitro,
CC then returning the cells to the patient, a more certain and controlled
CC response is achieved, compared with administration of the peptide plus
CC adjuvant
XX
SQ Sequence 9 AA;

Query Match 100.0%; Score 49; DB 4; Length 9;
Best Local Similarity 100.0%; Pred. NO. 2e+06;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
Db 1 STAPPVHNV 9

RESULT 2

ABG79089
ID ABG79089 standard; peptide; 9 AA.
XX
AC ABG79089;
XX
DT 15-NOV-2002 (first entry)
XX
DE Human MUC1 class I HLA widely expressed antigen peptide #2.
XX
XX Cell penetrating peptide; cancer; tumour; melanoma; thymoma; antigen;
KW lymphoma; sarcoma; lung cancer; non-Hodgkin's lymphoma; leukaemia;
KW Hodgkin's lymphoma; uterine cancer; cervical cancer; bladder cancer;
KW kidney cancer; adenocarcinoma; breast cancer; prostate cancer;
KW ovarian cancer; pancreatic cancer; epitope; vaccine; dendritic cell;
KW tumour infiltrating lymphocyte; TIL; human leukocyte antigen; HLA;
KW cytostatic; human.
XX
XX Homo sapiens.
XX
XX WO200264057-A2.
XX
XX 22-AUG-2002.
XX
XX 15-FEB-2002; 2002WO-US005212.
XX
XX 15-FEB-2001; 2001US-0268697P.
XX
XX (BAYU) BAYLOR COLLEGE MEDICINE.
XX
XX Wang R;
XX
XX WPI; 2002-627577/67.
XX
XX Novel composition for treating a disease in an animal, comprises an
PT immune effector cell and cell penetrating peptide associated with an
PT antigen or antibody.
XX
XX Disclosure; Page 18; 61pp; English.

XX The invention relates to a composition (I) comprising an immune effector
CC cell and a cell penetrating peptide (CPP) associated with an antigen or
CC antibody. Also included are (1) a vaccine comprising (I), CPP associated
CC with an antigen, and a pharmaceutically acceptable carrier and (2)
CC preparing a composition for a disease, by providing (I) and CPP
CC associated with an antigen for disease, and introducing the antigen-
CC associated CPP to (I), where antigen enters into the cell. The antigen
CC are, for example, tumour antigen derived epitopes recognised by tumour
CC infiltrating lymphocytes (TIL) of HLA (human leukocyte antigen) class I
CC or II. The composition is useful for enhancing immunity in an animal to a
CC disease, by administering a mature dendritic cell comprising CPP
CC associated with an antigen to disease, to the animal, such that following
CC the administration, animal is protected from disease, where the animal
CC comprises both CD4+ and CD8+ T cells. It is also useful for treating a

CC disease (e.g. cancer, tumour, melanoma, thymoma, lymphoma, sarcoma, lung
 CC cancer, non-Hodgkin's lymphoma, leukaemia, Hodgkin's lymphoma, uterine
 CC cancer, cervical cancer, bladder cancer, kidney cancer, adenocarcinoma,
 CC breast cancer, prostate cancer, ovarian cancer and pancreatic cancer).
 CC The animal is further subjected to a cancer treatment including surgery,
 CC radiation, chemotherapy or gene therapy. The administration of (I), with
 CC preferably dendritic cell is prior to, subsequent to or concurrent
 CC the cancer treatment. The present sequence is a tumour antigen derived
 CC epitope for inclusion in the composition of the invention

XX SQ Sequence 9 AA;

Query Match 100.0%; Score 49; DB 5; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPVHNV 9

RESULT 3

ADA50588
 ID ADA50588 standard; peptide; 9 AA.

XX AC ADA50588;

XX DT 20-NOV-2003 (first entry)

XX DE Mucin 1 (MUC-1) CTL epitope, SEQ ID NO:43.

XX KW Nucleic acid vaccine; DNA vaccine; tumour antigen; cytokine adjuvant;
 KW humoral response; cellular response; immune response; immunotherapy;
 KW cancer; cytostatic; vaccine; gene therapy; mucin 1; MUC-1;
 KW cytotoxic T lymphocyte; CTL epitope.

XX OS Unidentified.

XX PN WO2003031569-A2.

XX PD 17-APR-2003.

XX PF 18-SEP-2002; 2002WO-US029640.

XX PR 10-OCT-2001; 2001US-0328371P.

XX PA (CENZ) CENTOCOR INC.

XX PI Snyder L, Scallion B, Knight DM, McCarthy SG, Goletz TJ;
 PI Branigan PJ;

XX DR WPI; 2003-393437/37.

XX PT New nucleic acid vaccine, useful for eliciting an immune response to a
 PT cancer associated tumor protein in a mammal.

XX PS Claim 1a; Page 45; 92pp; English.

XX CC The invention relates to a nucleic acid vaccine comprising one or more
 CC tumour antigen-encoding nucleic acids and one or more cytokine adjuvant-
 CC encoding nucleic acids. The tumour antigen encoded by the vaccine is
 CC mucin 1 (MUC-1), the kallikrein KLK2, or prostate specific antigen (PSA,
 CC also known as KLK3), and the cytokine adjuvant encoded can be interleukin
 CC -12 (IL-12), granulocyte macrophage-colony stimulating factor (GM-CSF),
 CC or especially interleukin-18 (IL-18). The antigen-encoding nucleic acid
 CC is preferably under the control of a promoter such as the cytomegalovirus
 CC immediate early promoter, the dihydrofolate reductase promoter or the
 CC early or late SV40 promoters. The invention also encompasses the method
 CC of eliciting an immune response to a tumour antigen in a mammal using the
 CC vaccine of the invention. Coexpression of the antigen and adjuvant
 CC induces a humoral or cellular response to the tumour antigen, generating
 CC an immune response useful for treatment or prophylaxis of cancers. The
 CC present sequence represents a mucin 1 (MUC-1) polypeptide sequence which

CC is specifically claimed for use in the vaccine of the invention.
 XX SQ Sequence 9 AA;

Query Match 100.0%; Score 49; DB 6; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPVHNV 9

RESULT 4

ADG89655
 ID ADG89655 standard; peptide; 9 AA.

XX AC ADG89655;

XX DT 11-MAR-2004 (first entry)

XX DE Class I HLA-restricted widely expressed antigen #20.

XX KW metastatic cancer cell differentiation; mutated fibronectin;
 KW metastatic cancer; class I HLA-restricted; widely antigen.

XX OS Unidentified.

XX PN WO2003100027-A2.

XX PD 04-DEC-2003.

XX PF 28-MAY-2003; 2003WO-US016736.

XX PR 28-MAY-2002; 2002US-0393530P.

XX PA (BAYU) BAYLOR COLLEGE MEDICINE.

XX PI Wang R;

XX DR WPI; 2004-035134/03.

XX PT Identifying a cell that differentiates into a metastatic cancer cell,
 PT useful for preventing metastatic cancer, comprises identifying a mutated
 PT fibronectin in the cell.

XX PS Disclosure; SEQ ID NO 98; 137pp; English.

XX CC The invention comprises a method for identifying a cell that will
 CC differentiate into a metastatic cancer cell, the method involves
 CC identifying a mutated fibronectin in the cell. The method of the
 CC invention is useful for preventing metastatic cancer. The present amino
 CC acid sequence represents a Class I HLA-restricted widely expressed
 CC antigen.

XX SQ Sequence 9 AA;

Query Match 100.0%; Score 49; DB 8; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPVHNV 9

RESULT 5

ADG20359
 ID ADG20359 standard; peptide; 9 AA.

XX AC ADG20359;

XX DT 11-MAR-2004 (first entry)

XX Antigenic peptide SEQ ID NO:35.
 XX double-chimeric beta 2-microglobulin; antigenic peptide;
 KW antigen-presenting cell; beta 2-microglobulin;
 KW major histocompatibility complex class I epitope; MHC class I epitope;
 KW cytostatic; antibacterial; virucide; fungicide; protozoacide; vaccine;
 KW cytotoxic T lymphocyte induction; cancer; pathogenic organism;
 KW tumour associated antigen; pathogenic antigen.
 XX Synthetic.
 OS
 XX WO2003106616-A2.
 XX
 XX 24-DEC-2003.
 XX
 XX 12-JUN-2003; 2003WO-IL000501.
 XX
 XX 12-JUN-2002; 2002US-0388273P.
 XX
 XX (GAVI-) -GAVISH-GALLILEE BIO APPL LTD.
 XX
 XX Gross G, Margalit A;
 XX
 XX WPI; 2004-071554/07.
 XX
 XX Novel double-chimeric beta2-microglobulin polynucleotide useful for
 PT treating cancer, comprising sequence encoding polypeptide capable of
 PT presentation of antigenic peptides.
 XX
 XX Claim 16; SEQ ID NO 35; 86pp; English.
 XX
 XX The present invention describes a double-chimeric beta 2-microglobulin
 CC polynucleotide (I) comprising a sequence encoding a polypeptide (II) that
 CC is capable of high level presentation of antigenic peptides on antigen-
 CC presenting cells, where (II) comprising a beta 2-microglobulin molecule
 CC that is linked through its carboxyl terminal to a polypeptide stretch
 CC which allows the anchorage of the beta 2-microglobulin molecule to the
 CC cell membrane, and through its amino terminal to an antigenic peptide
 CC comprising major histocompatibility complex (MHC) class I epitope. The
 CC antigenic peptide is not related to an autoimmune disease. Also
 CC described: (1) an expression vector (III) comprising (I) and is a
 CC recombinant viral vector; (2) an antigen-presenting cell (IV) transfected
 CC with (I); (3) a DNA vaccine (V) comprising a (I) or (III); (4) a cellular
 CC vaccine (VI) for the prevention or treatment of cancer comprising (IV)
 CC which express (I) or tumour cells transfected with (I), where the cells
 CC have been pulsed with an antigenic peptide derived from one tumour
 CC associated antigen; and (5) a pharmaceutical composition (VII) comprising
 CC (I), (III) or (IV) as an active ingredient and carrier. (I) has
 CC cytostatic, antibacterial, virucide, fungicide and protozoacide
 CC activities, and can be used in vaccines, and for inducing cytotoxic T
 CC lymphocytes. (I) and (V) can be used for the prevention or treatment of
 CC cancer or for a disease caused by a pathogenic organism. (VI) is useful
 CC for prevention or treatment of cancer, or disease caused by a pathogenic
 CC organism, where (VI) presents one tumour associated antigen, or
 CC pathogenic antigen. (VI) is also useful for immunising a mammal against a
 CC tumour-associated antigen or a disease caused by a pathogenic organism,
 CC which involves immunising the mammal with (VI). (I) is useful for
 CC inducing class I-restricted CTL response in a mammal. The present
 CC sequence is used in the exemplification of the present invention.
 XX
 XX Sequence 9 AA;

Query Match 100.0%; Score 49; DB 8; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 Db 1 STAPPVHNV 9
 RESULT 6

ADU49630
 XX ADU49630 standard; peptide; 9 AA.
 AC ADU49630;
 XX
 XX 27-JAN-2005 (first entry)
 DT
 XX Human MUC1 CTL helper epitope sequence.
 DE
 XX PSA; tumour-associated protein; prostate specific antigen; kallikrein-2;
 KW KUK2; mucin-1; MUC1; interleukin;
 KW granulocyte-macrophage colony-stimulating factor; immunostimulant;
 KW cytostatic; vaccine; CTL epitope.
 KW
 XX Homo sapiens.
 OS
 XX WO2004096238-A1.
 PN
 XX 11-NOV-2004.
 PD
 XX 01-APR-2003; 2003WO-US010096.
 PF
 XX 01-APR-2003; 2003WO-US010096.
 PR
 XX (CENZ) CENTOCOR INC.
 XX (GOLE/) GOLETT T J.
 XX (MCCA/) MCCARTHY S G.
 XX (SCAL/) SCALLON B J.
 XX (SNYD/) SNYDER L A.
 XX (BRAN/) BRANIGAN P J.
 XX
 XX Goletz TJ, Mccarthy SG, Scallon BJ, Snyder LA, Branigan PJ;
 PI Knight DM;
 PI
 XX WPI; 2004-804620/79.
 DR
 XX N-PSDB; ADU49629.
 XX
 XX Composition comprising polynucleotide encoding antigenic determinant of
 PT tumor-associated protein (eg prostate specific antigen) and nucleic
 PT adjuvant (eg interleukin-18) useful for eliciting immune response to
 PT cancer associated tumor protein.
 XX
 XX Disclosure; SEQ ID NO 52; 105pp; English.
 XX
 XX The invention relates to a new composition that comprises a first
 CC isolated polynucleotide encoding or complementary to an antigenic
 CC determinant of a tumour-associated protein and a second isolated
 CC polynucleotide encoding or complementary to a nucleic acid adjuvant. The
 CC composition further comprises at least one promoter sequence controlling
 CC expression of the polynucleotides and a carrier or adjuvant. The promoter
 CC polynucleotide is human cytomegalovirus immediate early promoter.
 CC dihydrofolatereductase promoter, early SV40 promoter or late SV40
 CC promoter. The tumour-associated protein is prostate specific antigen
 CC (PSA), kallikrein-2 (KUK2) or mucin-1 (MUC1). The nucleic acid adjuvant
 CC encodes human interleukin (IL)-18 IL-12, granulocyte-macrophage colony-
 CC stimulating factor or B7-1 or its variant. The first and second
 CC polynucleotides are contained in the same or separate nucleic acid
 CC vectors. The composition is useful in eliciting an immune response to a
 CC cancer associated tumour protein in a mammal. The present sequence
 CC represents a human MUC1 polypeptide CTL helper epitope.
 XX
 XX Sequence 9 AA;

Query Match 100.0%; Score 49; DB 8; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 Db 1 STAPPVHNV 9
 RESULT 7

ADX08605
 ID ADX08605 standard; peptide; 9 AA.
 XX AC
 XX ADX08605;
 XX DT
 XX 21-APR-2005 (first entry)
 XX DE
 XX Class I HLA-restricted widely expressed antigen #20.
 XX KW
 XX vaccine; infection; viral infections; virucide; bacterial infection;
 KW antibacterial; yeast infection; fungicide; fungal infection;
 KW protozoal infection; protozoicide; cancer; cytostatic; melanoma;
 KW lung tumor; colon tumor; breast tumor; leukemia; autoimmune disease;
 KW multiple sclerosis; neuroprotective; rheumatoid arthritis; antiarthritic;
 KW antirheumatic; systemic lupus erythematosus; antiinflammatory;
 KW dermatological; immunosuppressive.
 XX OS
 XX Unidentified.
 XX PN
 XX WO2005011730-A1.
 XX PD
 XX 10-FEB-2005.
 XX PF
 XX 30-JUL-2004; 2004WO-GB003285.
 XX PR
 XX 01-AUG-2003; 2003GB-00018096.
 XX PA (UNLO) QUEEN MARY & WESTFIELD COLLEGE.
 XX PI Wang P, Li S;
 XX DR
 XX WPI; 2005-152360/16.
 XX PT
 XX New vaccine composition comprises inverted microsomes from animal cells
 PT with an externally disposed peptide antigen and a protein of the Major
 PT Histocompatibility Complex (MHC), useful for treating or preventing, e.g.
 PT cancer.
 XX PS
 XX Disclosure; Page 53; 83pp; English.
 XX CC
 XX The invention comprises a vaccine composition that consists of isolated
 CC inverted microsomes from an animal cell (or its membrane fragments), in
 CC association with an externally disposed peptide antigen and a protein of
 CC the MHC. The vaccine composition of the invention is useful for the
 CC prophylaxis or treatment of: infection (e.g. viral, bacterial, yeast,
 CC fungal or protozoal), cancer (e.g. melanoma, lung adenocarcinoma, colon
 CC cancer, breast cancer or leukemia), autoimmune disease (e.g. multiple
 CC sclerosis, rheumatoid arthritis or systemic lupus erythematosus). The
 CC present amino acid sequence represents a class I HLA-restricted widely
 CC expressed antigen.
 XX SQ
 XX Sequence 9 AA;
 Query Match 100.0%; Score 49; DB 9; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 STAPPVHNV 9
 DB 1 STAPPVHNV 9
 RESULT 8
 ADY51475
 ID ADY51475 standard; peptide; 9 AA.
 XX AC
 XX ADY51475;
 XX DT
 XX 19-MAY-2005 (first entry)
 XX DE
 XX HLA-A2 peptide modified MUC-1.1 for stimulating cytotoxic T-lymphocytes.
 XX immune stimulation; cytostatic; antimicrobial; antibacterial; virucide;

KW antiparasitic; cytotoxic T-lymphocyte; major histocompatibility complex;
 KW antigen; cancer; bacterial infection; viral infection;
 KW parasitic infection; CD80.
 XX OS
 XX Homo sapiens.
 XX PN
 XX US2005048646-A1.
 XX PD
 XX 03-MAR-2005.
 XX PF
 XX 29-JUL-2004; 2004US-00901067.
 XX PR
 XX 25-AUG-2003; 2003JP-00341822.
 XX PR
 XX 28-JAN-2004; 2004JP-00020436.
 XX PA (MEDI-) MEDINET CO LTD.
 XX PI
 XX Nieda M, Noguchi K, Tadaki T, Sasawatari S;
 XX DR
 XX WPI; 2005-195290/20.
 XX PT
 XX Inducing a cytotoxic T lymphocyte, useful for treating cancer or
 PT infectious disease, comprises contacting a cell line with an antigenic
 PT peptide and a lymphocyte.
 XX PS
 XX Disclosure; Page 7; 29pp; English.
 XX CC
 XX The invention relates to a method of inducing a CTL (cytotoxic T
 CC lymphocyte) by contacting a cell line expressing at least one major
 CC histocompatibility antigen (MHC) class I molecule, an antigen, and a co-
 CC stimulatory molecule, where the cell line is transformed with at least
 CC one co-stimulatory molecule or exogenous antigen, with an isolated or
 CC purified antigenic peptide and with a lymphocyte for a time and under
 CC conditions for inducing a CTL specific for the antigenic peptide. The
 CC method is useful for inducing a CTL. The CTL and method are useful for
 CC treating or preventing cancer or an infectious disease, e.g. a bacterial,
 CC viral, or parasitic infections. The present method provides CTLs having a
 CC high specificity for a disease site, thus allowing a highly effective
 CC treatment. Also, compared to conventional method, the present method uses
 CC a synthetic peptide and thus imposes less burden on the patient. The CTLs
 CC induced using the present method are more likely to function specifically
 CC to individual disease antigens than the CTLs induced conventionally, thus
 CC can be used to stimulate the cytotoxic T-lymphocytes in the method of the
 CC invention. This sequence corresponds to a cancer antigenic peptide to
 CC stimulate the cytotoxic T-lymphocytes by the method of the invention.
 XX SQ
 XX Sequence 9 AA;
 Query Match 100.0%; Score 49; DB 9; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 STAPPVHNV 9
 DB 1 STAPPVHNV 9
 RESULT 9
 AAR68013
 ID AAR68013 standard; peptide; 9 AA.
 XX AC
 XX AAR68013;
 XX DT
 XX 25-MAR-2003 (revised)
 XX DT
 XX 05-SEP-1995 (first entry)
 XX DE
 XX Mucin peptide p9-17.
 XX KW
 XX Mucin; multiple tandem repeat; vaccine; pancreas cancer; breast cancer;
 KW ovary cancer; colon cancer; HIV.
 XX OS
 XX Synthetic.

PN W09503825-A1.
 XX
 PD 09-FEB-1995.
 XX
 PF 29-JUL-1994; 94WO-US008477.
 XX
 PR 30-JUL-1993; 93US-00099354.
 XX
 PA (FINN/) FINN O J.
 PA (FONT/) FONTENOT J D.
 PA (MONT/) MONTELO RO C.
 XX
 PI Finn OJ, Fontenot JD, Montelaro RC;
 XX
 DR WPI; 1995-082033/11.
 XX
 XX Synthetic multiple tandem repeat mucin-1 peptides and analogues - have
 PT native conformation in the absence of glycosylation and are linked to
 PT epitopes; for vaccines and tests of cancer, viruses and bacteria.
 XX
 PS Disclosure; Page 54; 125pp; English.
 XX
 CC A synthetic peptide such as p105 (AAR68022) includes 5 tandem repeats of
 CC the mucin peptide given in AAR68004. The DTR motif, located between the
 CC first 2 prolines of each repeat, is the target of an anti-mucin immune
 CC response, and can be substituted by a sequence from a virus, tumor
 CC antigen or autoantigen. Drugs based on 9-amino acid portions (AAR68007-
 CC 21) of the mucin peptide were developed. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 SQ Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 2; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 Db ||||| |
 1 STAPPANGV 9
 RESULT 10
 ID AAW78844 standard; peptide; 9 AA.
 AC AAW78844;
 XX
 DT 17-NOV-1998 (first entry)
 XX
 DE MUC-1 protein fragment 9-17.
 XX
 KW Microparticle; delivery; polymeric matrix; autoantigen; tumour antigen;
 KW class II associated peptide; pathogen; gene therapy; genetic disease;
 KW infection; downregulation; immune response.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN W09831398-A1.
 XX
 PD 23-JUL-1998.
 XX
 PF 22-JAN-1998; 98WO-US001499.
 XX
 PR 22-JAN-1997; 97US-00787547.
 PR 06-JAN-1998; 98US-00003253.
 XX
 PA (PANG-) PANGAEA PHARM INC.
 XX
 FI Hedley ML, Curley JM, Langer RS, Lunsford LB;
 XX
 DR WPI; 1998-427556/36.
 XX

PT New preparations of microparticles - comprising a synthetic polymer
 PT matrix and nucleic acid comprising an expression vector for use in gene
 therapy.
 XX
 PS Disclosure; Page 10; 101pp; English.
 XX
 CC A microparticle preparation (MP) has been developed, consisting of
 CC microparticles having a diameter of less than 100 nm. The MP comprises:
 CC (a) a polymeric matrix (PM) consisting of one or more synthetic polymers
 CC having a solubility in water of less than 1 mg/l; and (b) an expression
 CC vector selected from RNA molecules (at least 50% of which are closed
 CC circles) or circular plasmid DNA (at least 50% of which are supercoiled).
 CC Also described is a MP of at most 20 microns in diameter, comprising: (a)
 CC a PM; and (b) a NAM comprising an expression control sequence operatively
 CC linked to a coding sequence, where the coding sequence encodes an
 CC expression product selected from: (i) a polypeptide at least 7 amino
 CC acids in length, having a sequence identical to the sequence of: (i) a
 CC fragment of a naturally-occurring mammalian protein; or (ii) a fragment
 CC of a naturally-occurring protein from an infectious agent which infects a
 CC mammal; (2) a peptide having a length and sequence which permits it to
 CC bind to an MHC class I or II molecule; and (3) the polypeptide or the
 CC peptide linked to a trafficking sequence. AAW69763 to AAW69765, and
 CC AAW78793 to AAW78897 are peptide fragments for use in the present
 CC invention. The MPs are highly effective vehicles for the delivery of
 CC polynucleotides into phagocytic cells. They can be used for gene therapy,
 CC e.g. for treating genetic diseases, infections or tumours or for
 CC downregulating an immune response
 XX
 SQ Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 2; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 Db ||||| |
 1 STAPPANGV 9
 RESULT 11
 ID AAW72715 standard; peptide; 9 AA.
 XX
 AC AAW72715;
 XX
 DT 11-JAN-1999 (first entry)
 XX
 DE Mucin peptide preparation p 9-17.
 XX
 KW Mucin; muc-1; human; cancer; infectious disease; vaccine; diagnosis;
 KW multiple tandem repeat; pancreatic cancer; breast cancer; colon cancer.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN US5827666-A.
 XX
 PD 27-OCT-1998.
 XX
 PF 10-AUG-1994; 94US-00288059.
 XX
 PR 30-JUL-1993; 93US-00099354.
 XX
 PA (UYPI-) UNIV PITTSBURGH.
 XX
 PI Montelaro RC, Fontenot JD, Finn OJ;
 XX
 DR WPI; 1998-593988/50.
 XX
 XX Assay for cancer antibodies - using synthetic peptide comprising multiple
 PT tandem repeats of muc-1.
 XX
 PS Disclosure; Col 25; 45pp; English.

XX An assay has been developed for antibodies to pancreatic, breast or colon
 CC cancer in a sample. The assay comprises contacting the sample with a
 CC synthetic muc-1 peptide that comprises at least two 20 amino acid tandem
 CC repeats of muc-1 and is capable of attaining native conformation in the
 CC absence of glycosylation, and detecting any peptide-antibody complex
 CC formation. The assay can be used in the diagnosis of e.g. pancreatic,
 CC breast or colon cancer. The present sequence represents a mucin peptide
 CC preparation from the present invention
 XX

SQ Sequence 9 AA;

Query Match 79.6%; Score 39; DB 2; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 12

ID AAY46704 standard; peptide; 9 AA.

XX AC AAY46704;

XX DT 01-DEC-1999 (first entry)

XX DE Immunogenic peptide having a human leukocyte antigen binding motif #1315.

XX KW Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; HLA;
 KW immune response; T cell activation; major histocompatibility complex;
 KW cytotoxic T lymphocyte; CTL; tumour rejection; viral infection; cancer;
 KW prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma;
 KW vaccine; immunisation.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN W09945954-A1.

XX PD 16-SEP-1999.

XX PF 13-MAR-1998; 98WO-US005039.

XX PR 13-MAR-1998; 98WO-US005039.

XX PA (EPIM-) EPIMUNE INC.

XX PI Sette A, Kubo RT, Sidney J, Celis E, Grey HM, Southwood S;

XX DR WPI; 1999-551214/46.

XX New immunogenic peptides with HLA binding motif, useful in treatment and
 PT diagnosis of cancers and viral diseases.

XX PS Claim 1; Page 82; 150pp; English.

XX AAY45390 to AAY48214 represent specifically claimed immunogenic peptides
 CC having a human major histocompatibility complex (MHC) Class I (also known
 CC as human leukocyte antigen (HLA)) binding motif. The immunogenic peptides
 CC can bind to a specific HLA allele (i.e. HLA-A subtypes HLA-A2.1, A1, A3.2
 CC or A24.1 or HLA-B or C) and induce a cytotoxic T cell response against
 CC the antigen from which the peptide is derived. Cytotoxic T lymphocytes
 CC (CTLs) which destroy antigen-bearing cells are normally induced by an
 CC antigen in the form of a peptide fragment bound to a HLA molecule, rather
 CC than the intact foreign antigen itself, and are particularly important in
 CC tumour rejection and in fighting viral infections. The peptides are
 CC therefore useful therapeutically to treat or prevent viral infections and
 CC cancers in mammals (especially humans) e.g. prostate cancer, hepatitis B
 CC and C, AIDS, and renal carcinoma. They can be administered as vaccines to
 CC elicit an immune response in individuals susceptible or otherwise at risk

CC of viral infection or cancer, or used to treat chronic or acute
 CC conditions. They are also useful diagnostically, and can be used to
 CC induce a cytotoxic T cell response, by contacting a cytotoxic T cell with
 CC the peptide e.g. to produce CTLs ex vivo for infusion back into a
 CC patient. The polynucleotides encoding the immunogenic peptides are also
 CC useful therapeutically and for immunisation as above
 XX

SQ Sequence 9 AA;

Query Match 79.6%; Score 39; DB 2; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 13

AAW67583
 ID AAW67583 standard; peptide; 9 AA.

XX AC AAW67583;

XX DT 02-MAR-1999 (first entry)

XX DE T-cell activation peptide #1.

XX KW Activated T helper cell; CD4+; cytotoxic T cell; CD8+; liposome; epitope;
 KW peripheral blood lymphocyte; antigen-presenting cell; APC; virus; tumour;
 KW bacterium; parasite; cytokine; vaccine; cancer; malaria; HIV; hepatitis;
 KW tuberculosis.

XX OS Synthetic.

XX PN W09850527-A1.

XX PD 12-NOV-1998.

XX PF 07-MAY-1998; 98WO-US009288.

XX PR 08-MAY-1997; 97US-0045949P.

XX PA (BIOM-) BIOMIRA INC.

XX PI Agrawal B, Krantz MJ, Reddish MA, Longenecker BM;

XX DR WPI; 1999-034715/03.

XX Method of activation of T cells - by exposure to antigen-presenting cells
 PT loaded with antigen in liposome, used for, e.g. treating cancer and
 PT microbial infections.

XX PS Disclosure; Page 6; 75pp; English.

XX Peptides AAW67583-W67611 are used to produce activated T helper (CD4+) and cytotoxic (CD8+) T cells. The activated T cells are produced by treating peripheral blood lymphocytes with liposome-encapsulated peptide antigen to generate Ag-loaded antigen-presenting cells (APC), contacting native or anergic T-cells with these APC, and isolating the resulting activated T-cells. The cells are specific for a particular antigen, particularly one derived from a tumour, but also those from viruses, bacteria and other parasites. It can also be used to identify antigens and epitopes able to generate an Ag-specific T-cell response (by assessing proliferation and cytokine release). Also the Ag-loaded APC can be used as cellular vaccines for treating cancer (claimed) or other diseases (e.g. malaria, human immune deficiency virus infection, hepatitis, tuberculosis). The activated T-cells can be used to treat the same conditions by adoptive T-cell transfer therapy

XX SQ Sequence 9 AA;

Query Match 79.6%; Score 39; DB 2; Length 9;

PN WO200119408-A1.
 XX 22-MAR-2001.
 XX 18-SEP-2000; 2000WO-US025559.
 XX 16-SEP-1999; 99US-00398534.
 PR 16-SEP-1999; 99US-0154665P.
 PR 09-DEC-1999; 99US-00458173.
 PR 09-DEC-1999; 99US-0169846P.
 XX (ZYCO-) ZYCOS INC.
 PA Hedley ML, Urban RC, Chicx RM;
 XX WPI; 2001-265996/27.
 DR Novel nucleic acids encoding polypeptide polypeptides containing multiple
 PT epitopes from one or more proteins, useful for treating tumors and as
 PT vaccines against pathogenic agents.
 XX Disclosure; Page 7; 64pp; English.
 XX This invention relates to polynucleotides encoding a hybrid polypeptide
 CC comprising a signal sequence and three segments that are either
 CC contiguous or separated by a spacer amino acid or spacer peptide. The
 CC invention specifically details polynucleotides encoding a polypeptide
 CC peptide where the peptide segments are tumour antigens or a naturally
 CC occurring protein of a pathogenic agent. The polypeptide peptides exhibit
 CC antiviral and immunostimulatory activity. The polynucleotide and
 CC polypeptide peptides are useful for eliciting an immune response in a
 CC mammal. The polynucleotide and protein are useful as vaccines for
 CC treating tumors and pathogenic infections. The polynucleotide is also
 CC useful for preventing or treating human papillomavirus (HPV)-associated
 CC diseases, particularly exophytic condyloma, flat condyloma, cervical
 CC cancer, respiratory papilloma, conjunctival papilloma, genital-tract HPV
 CC infection, cervical dysplasia, high grade squamous intraepithelial
 CC lesions, and anal HPV infection. The polynucleotide and polypeptide are
 CC useful for generating or enhancing prophylactic or therapeutic immune
 CC response against pathogens, tumours or autoimmune diseases in a
 CC population of individuals having diverse MHC allotypes, as positive
 CC controls in T cell stimulation assays in vitro, and as tools to
 CC understand processing of epitopes within cells. Peptides AAB95894 -
 CC AAB96037 and AAB96044 - AAB96048 represent major histocompatibility
 CC complex I (MHC I) associated tumour and pathogen antigens. The peptides
 CC can be used as part of the polypeptide proteins of the invention. Also
 CC included are examples of the polypeptide proteins represented by AAB96050
 CC - AAB96052, and localisation signal peptides AAB96038 - AAB96043 and
 CC AAB96049 which can be used in the construction of the polypeptide
 CC peptides
 XX SQ Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 4; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVNVV 9
 Db 1 STAPPAGV 9
 RESULT 17
 AAG93752
 ID AAG93752 standard; peptide; 9 AA.
 XX AAG93752;
 AC AAG93752;
 XX 17-SEP-2001 (first entry)
 DT Human MUC-1 peptide.
 DE Continuous flow production; microparticle; gene therapy;
 XX
 KW antisense therapy; vaccination; treatment; autoimmune disease;
 KW immune response modulation.
 XX Homo sapiens.
 OS WO200136583-A1.
 PN 25-MAY-2001.
 PD 17-NOV-2000; 2000WO-US031770.
 PF 19-NOV-1999; 99US-00443654.
 PR (ZYCO-) ZYCOS INC.
 XX Hedley ML, Hsu Y, Tyo M;
 XX WPI; 2001-425203/45.
 DR Continuous production of microparticles containing nucleic acid for e.g.
 PT gene therapy, comprises mixing a solution of polymeric material and
 PT nucleic acid with a surfactant solution, removing solvent and drying.
 XX Disclosure; Page 11; 47pp; English.
 XX The present sequence is that of a peptide of the invention. The invention
 CC relates to a method for scalable, continuous flow production of a nucleic
 CC acid containing microparticle that maintains the structural integrity of
 CC the associated nucleic acid and results in a microparticle having purity
 CC suitable for introduction into an animal host. Microparticles prepared
 CC according to the method can be used for delivery of a nucleic acid for
 CC gene therapy, antisense therapy, vaccination, treatment of autoimmune
 CC disease and either specific or non-specific modulation of an immune
 CC response. The microparticles may also be used to deliver nucleic acid
 CC encoding a protein or peptide useful in any kind of therapy. The method
 CC is economical, aseptic and scalable. The method also enables control over
 CC the size of microparticles. The microparticles produced are free of
 CC impurities such as organic solvents and are readily dispersed in a wide
 CC range of dispersing agents
 XX SQ Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 4; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVNVV 9
 Db 1 STAPPAGV 9
 RESULT 18
 AAB86120
 ID AAB86120 standard; peptide; 9 AA.
 XX AAB86120;
 AC AAB86120;
 XX 23-JUL-2001 (first entry)
 DT Human anti-MUC1 associated-epitope SEQ ID 1.
 XX MUC1; mucin; anti-MUC1; epitope; human; detection; immunogenic; antibody;
 KW breast cancer screening.
 XX Homo sapiens.-
 OS EP1096257-A2.
 XX EP1096257-A2.
 PN 02-MAY-2001.
 PD 24-OCT-2000; 2000EP-00123053.
 PF 29-OCT-1999; 99DE-01052160.
 XX PR

XX (SAUE//) SAUER M.
 PA (WOLF//) WOLFRUM J.
 XX Sauer M, Wolfrum J;
 XX WPI; 2001-293137/31.
 XX Detecting molecules in solution e.g. tumor markers for breast cancer
 PT screening, involves adding dye-labelled binding partner, applying
 PT electric field and detecting dye at anode or cathode.
 XX Example 1; Page 8; 16pp; German.
 XX This invention describes a novel method for detecting a molecule (1) in a
 CC solution which involves coupling another molecule (2) with a dye,
 CC selecting the net charge in the solution of dye-labelled molecule to be
 CC opposite to and less than that in the solution of molecule (1), adding
 CC dye-labelled molecule (2) to molecule (1), applying an electric field and
 CC detecting the dye at the anode or cathode (depending on the charge). The
 CC invention also describes a method for detecting a third molecule (3) in a
 CC solution which can bond to molecule (1) and to a second molecule (2) by
 CC coupling dye to (2) and selecting the net charge as above, forming a
 CC complex which can be detected at the cathode if the net charge in the
 CC solution is negative or at the anode if the net charge is positive. This
 CC sequence represents an immunogenic fragment of human MUC1 containing an
 CC epitope which is used to raise anti-MUC1 antibodies, used in screening
 CC for breast cancer. This sequence is used to illustrate the method
 CC described in the invention. The simple and reliable method for the
 CC detection of certain molecules (e.g. anti-MUC1 antibodies or tumor-
 CC specific MUC1 proteins) has a sensitivity 1000 times greater than that of
 CC ELISA tests
 XX
 XX Sequence 9 AA;
 SQ Query Match 79.6%; Score 39; DB 4; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 ||||| |
 Db 1 STAPPAGV 9
 ||||| |
 RESULT 19
 ABG79088
 ID ABG79088 standard; peptide; 9 AA.
 XX AC ABG79088;
 XX DT 15-NOV-2002 (first entry)
 XX DE Human MUCI class I HLA widely expressed antigen peptide #1.
 XX KW Cell penetrating peptide; cancer; tumour; melanoma; thymoma; antigen;
 KW lymphoma; sarcoma; lung cancer; non-Hodgkin's lymphoma; leukaemia;
 KW Hodgkin's lymphoma; uterine cancer; cervical cancer; bladder cancer;
 KW kidney cancer; adenocarcinoma; breast cancer; prostate cancer;
 KW ovarian cancer; pancreatic cancer; epitope; vaccine; dendritic cell;
 KW tumour infiltrating lymphocyte; TIL; human leukocyte antigen; HLA;
 KW cytostatic; human.
 XX Homo sapiens.
 OS
 XX WO200264057-A2.
 XX PN 22-AUG-2002.
 XX PD
 XX PF 15-FEB-2002; 2002WO-US005212.
 XX PR 15-FEB-2001; 2001US-0269687P.
 XX PA (BAYU) BAYLOR COLLEGE MEDICINE.

XX Wang R;
 PI WPI; 2002-627577/67.
 DR Novel composition for treating a disease in an animal, comprises an
 PT immune effector cell and cell penetrating peptide associated with an
 PT antigen or antibody.
 XX Disclosure; Page 18; 61pp; English.
 PS
 XX The invention relates to a composition (I) comprising an immune effector
 CC cell and a cell penetrating peptide (CPP) associated with an antigen or
 CC antibody. Also included are (1) a vaccine comprising (I), CPP associated
 CC with an antigen, and a pharmaceutically acceptable carrier and (2)
 CC preparing a composition for a disease, by providing (I) and CPP
 CC associated with an antigen for disease, and introducing the antigen-
 CC associated CPP to (I), where antigen enters into the cell. The antigens
 CC are, for example, tumour antigen derived epitopes recognised by tumour
 CC infiltrating lymphocytes (TIL) of HLA (human leukocyte antigen) class I
 CC or II. The composition is useful for enhancing immunity in an animal to a
 CC disease, by administering a mature dendritic cell comprising CPP
 CC associated with an antigen to disease, to the animal, such that following
 CC the administration, animal is protected from disease, where the animal
 CC comprises both CD4+ and CD8+ T cells. It is also useful for treating a
 CC disease (e.g. cancer, tumour, melanoma, thymoma, lymphoma, sarcoma, lung
 CC cancer, non-Hodgkin's lymphoma, leukaemia, Hodgkin's lymphoma, uterine
 CC cancer, cervical cancer, bladder cancer, kidney cancer, adenocarcinoma,
 CC breast cancer, prostate cancer, ovarian cancer and pancreatic cancer).
 CC The animal is further subjected to a cancer treatment including surgery,
 CC radiation, chemotherapy or gene therapy. The administration of (I),
 CC preferably dendritic cell is prior to, subsequent to or concurrent with,
 CC the cancer treatment. The present sequence is a tumour antigen derived
 CC epitope for inclusion in the composition of the invention
 XX
 XX Sequence 9 AA;
 SQ Query Match 79.6%; Score 39; DB 5; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 ||||| |
 Db 1 STAPPAGV 9
 ||||| |
 RESULT 20
 AAU82062
 ID AAU82062 standard; peptide; 9 AA.
 XX AC AAU82062;
 XX DT 09-APR-2002 (first entry)
 XX DE Antigenic peptide M1b associated with cancer (Muc1).
 XX KW T-cell binding ligand; TCBL; peptide G'; human MHC class II beta chain;
 KW peptide J; human beta-2-microglobulin; HIV-1; TCBL peptide construct;
 KW immunological disorder; immune response; human immunodeficiency virus;
 KW herpes simplex virus infection; HSV; malaria; tuberculosis; cancer; CBA;
 KW acquired immunodeficiency syndrome; AIDS; allergy; autoimmune disease;
 KW autoimmune myocarditis; cytostatic; antiinflammatory.
 XX
 OS Synthetic.
 XX WO200189286-A2.
 XX PN 29-NOV-2001.
 XX PD
 XX PF 24-MAY-2001; 2001WO-US016793.
 XX PR 24-MAY-2000; 2000US-0206548P.
 XX PA

PA (CELS-) CEL-SCI CORP.
 XX Zimmerman DS, Sarin PS;
 XX WPI; 2002-083037/11.
 XX New T cell binding ligand peptide for treating immunological disorders
 PT such as herpes simplex virus, tuberculosis, cancers, acquired
 PT immunodeficiency syndrome and allergies.
 XX Disclosure; Page 26; 110pp; English.
 XX The present invention relates to novel T-cell binding ligand (TCBL)
 CC peptides (e.g. peptide G' (modified human MHC class II beta chain peptide
 CC G, peptide J (human beta-2-microglobulin peptide) and HIV-1 peptides) and
 CC TCBL peptide constructs for treating immunological disorders. The peptide
 CC constructs are useful for eliciting a cellular immune response in a human
 CC patient. The method comprises administering the peptide construct to the
 CC patient preferably in combination with an immune response adjuvant. The
 CC peptide constructs in the form of conjugated peptides are useful for
 CC eliciting a cellular immune response in a patient exposed to or at risk
 CC for exposure to the human immunodeficiency virus (HIV). The TCBL peptides
 CC are useful for treating a patient suffering from an immunological
 CC disorder such as herpes simplex virus (HSV) infection, malaria,
 CC tuberculosis, cancers, acquired immunodeficiency syndrome (AIDS),
 CC allergies, autoimmune diseases (e.g. arthritis, Graves disease, multiple
 CC sclerosis (MS), autoimmune myocarditis, diabetes and lupus) by
 CC administering a peptide construct comprising a TCBL peptide bonded to an
 CC antigenic peptide associated with the disorder. Unlike prior art peptide
 CC conjugates, a modified version of peptide G has long range stabilisation
 CC and also enhances the immune response. AAU82019-AAU82114 represent T-cell
 CC specific binding ligand peptides, peptide constructs or peptides used in
 CC their construction
 XX Sequence 9 AA;
 SQ

Query Match 79.6%; Score 39; DB 5; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 21
 ADA50590
 ID ADA50590 standard; peptide; 9 AA.
 XX ADA50590;
 XX 20-NOV-2003 (first entry)
 DT Mucin 1 (MUC-1) CTL epitope, SEQ ID NO:45.
 DE Nucleic acid vaccine; DNA vaccine; tumour antigen; cytokine adjuvant;
 XX humoral response; cellular response; immune response; immunotherapy;
 KW cancer; cytostatic; vaccine; gene therapy; mucin 1; MUC-1;
 KW cytotoxic T lymphocyte; CTL epitope.
 XX Unidentified.
 OS WO2003031569-A2.
 XX 17-APR-2003.
 PD 18-SEP-2002; 2002WO-US029640.
 PF 10-OCT-2001; 2001US-0328371P.
 XX (CENZ) CENTOCOR INC.
 XX Snyder L, Scallon B, Knight DM, McCarthy SG, Goletz TJ;

PI Branigan PJ;
 XX WPI; 2003-393437/37.
 XX New nucleic acid vaccine, useful for eliciting an immune response to a
 PT cancer associated tumor protein in a mammal.
 XX Claim 1a; Page 45; 92pp; English.
 XX The invention relates to a nucleic acid vaccine comprising one or more
 CC tumour antigen-encoding nucleic acids and one or more cytokine adjuvant-
 CC encoding nucleic acids. The tumour antigen encoded by the vaccine is
 CC mucin 1 (MUC-1), the kallikrein KKK2, or prostate specific antigen (PSA,
 CC also known as KLK3), and the cytokine adjuvant encoded can be interleukin
 CC -12 (IL-12), granulocyte macrophage-colony stimulating factor (GM-CSF),
 CC or especially interleukin-18 (IL-18). The antigen-encoding nucleic acid
 CC is preferably under the control of a promoter such as the cytomegalovirus
 CC immediate early promoter, the dihydrofolate reductase promoter or the
 CC early or late SV40 promoters. The invention also encompasses the method
 CC of eliciting an immune response to a tumour antigen in a mammal using the
 CC vaccine of the invention. Coexpression of the antigen and adjuvant
 CC induces a humoral or cellular response to the tumour antigen, generating
 CC an immune response useful for treatment or prophylaxis of cancers. The
 CC present sequence represents a mucin 1 (MUC-1) polypeptide sequence which
 CC is specifically claimed for use in the vaccine of the invention.
 XX Sequence 9 AA;
 SQ

Query Match 79.6%; Score 39; DB 6; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 22
 ABU96608
 ID ABU96608 standard; peptide; 9 AA.
 XX ABU96608;
 XX 12-AUG-2003 (first entry)
 DT MHC class I associated MUC-1 peptide.
 DE Microparticle; microspheres; polynucleotide delivery; phagocytic cell;
 XX tumour; viral infection; bacterial infection; fungal infection;
 KW protozoan infection; gene therapy; major histocompatibility complex;
 KW MHC class I.
 XX Unidentified.
 OS US2002182258-A1.
 XX 05-DEC-2002.
 PD 18-JUL-2001; 2001US-00909460.
 PF 22-JAN-1997; 97US-0035983P.
 XX 06-JAN-1998; 98US-00003253.
 PR 22-JAN-1998; 98WO-US001499.
 PR 11-MAR-1999; 99US-00266463.
 PR 27-MAY-1999; 99US-00321346.
 XX (ZYCO-) ZYCOS INC.
 XX Lunsford LB, Putnam D, Hedley ML;
 XX WPI; 2003-438782/41.
 XX Microparticles, useful as vehicles for delivery of polynucleotides to

PT phagocytic cells, comprises polymeric matrix, lipid, and nucleic acid
 PT molecule.

XX Disclosure; Page 4; 37pp; English.

XX The invention relates to a microsphere (microsphere) less than 20
 CC microns in diameter that comprises: (1) a polymeric matrix; (2) a lipid;
 CC and (3) a nucleic acid molecule. The microsphere is not encapsulated in
 CC a liposome and the microsphere does not comprise a cell. The
 CC microsphere is used as a vehicle for the delivery of polynucleotides
 CC into phagocytic cells. The microsphere can be used to express antigens
 CC to treat tumour cells or viral, bacterial, fungal or protozoan
 CC infections. The microsphere can be made without adversely affecting
 CC nucleic acid integrity. The present sequence represents the amino acid
 CC sequence of a major histocompatibility complex, MHC, class I associated
 CC peptide

XX Sequence 9 AA;

Query Match 79.6%; Score 39; DB 6; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 23

ADG89654
 ID ADG89654 standard; peptide; 9 AA.

AC ADG89654;

XX 11-MAR-2004 (first entry)

XX Class I HLA-restricted widely expressed antigen #19.

XX metastatic cancer cell differentiation; mutated fibronectin;
 KW metastatic cancer; class I HLA-restricted; widely antigen.

XX Unidentified.

XX WO2003100027-A2.

XX 04-DEC-2003.

XX 28-MAY-2003; 2003WO-US016736.

XX 28-MAY-2002; 2002US-0383530P.

XX (BAYU) BAYLOR COLLEGE MEDICINE.

XX Wang R;

XX WPI; 2004-035134/03.

XX Identifying a cell that differentiates into a metastatic cancer cell,
 PT useful for preventing metastatic cancer, comprises identifying a mutated
 PT fibronectin in the cell.

XX Disclosure; SEQ ID NO 97; 137pp; English.

XX The invention comprises a method for identifying a cell that will
 CC differentiate into a metastatic cancer cell, the method involves
 CC identifying a mutated fibronectin in the cell. The method of the
 CC invention is useful for preventing metastatic cancer. The present amino
 CC acid sequence represents a Class I HLA-restricted widely expressed
 CC antigen.

XX Sequence 9 AA;

Query Match 79.6%; Score 39; DB 8; Length 9;

Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 24

ADSB7165
 ID ADSB7165 standard; peptide; 9 AA.

XX ADSB7165;

XX 18-NOV-2004 (first entry)

XX Genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide - SEQ ID 181.

XX vaccine; ubiquitin; Ub; T-cell target; melanoma; sarcoma;
 KW Hodgkins lymphoma; non-Hodgkins; leukaemia; neuroblastoma; myeloma;
 KW lung cancer; stomach; skin; thyroid; ovary; prostate; womb; pancreas;
 KW colon; bladder; breast; oesophagus; kidney; brain; epitope; MUC1.

XX Unidentified.

XX WO2004035085-A1.

XX 29-APR-2004.

XX 16-OCT-2003; 2003WO-JP013279.

XX 17-OCT-2002; 2002JP-00302816.

XX (KYUS-) KYUSHU TLO CO LTD.

XX Himeno K, Furue M, Maehara Y;

XX WPI; 2004-357144/33.

XX Gene vaccine containing cancer antigen genes ligated to ubiquitin genes
 PT or cytokine genes for prevention and treatment of cancer.

XX Disclosure; SEQ ID NO 181; 266pp; Japanese.

XX The invention relates to a novel genetic vaccine containing the ubiquitin
 CC gene together with a gene encoding an antigenic protein containing a T-
 CC cell target sequence. The vaccine of the invention may be useful for
 CC prevention and treatment of cancers including melanoma, sarcoma, lymphoma
 CC (Hodgkins or non-Hodgkins), leukaemia, neuroblastoma, myeloma and cancer
 CC of the lung, stomach, skin, thyroid, ovary, prostate, womb, pancreas,
 CC colon, bladder, breast, oesophagus, kidney or brain. The current sequence
 CC is that of a genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide
 CC of the invention.

XX Sequence 9 AA;

Query Match 79.6%; Score 39; DB 8; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGGV 9

RESULT 25

ADU49634
 ID ADU49634 standard; peptide; 9 AA.

XX ADU49634;

XX 27-JAN-2005 (first entry)

DE Human MUC1 CTL helper epitope sequence.
 XX
 KW PSA; tumour-associated protein; prostate specific antigen; kallikrein-2;
 KW KLK2; mucin-1; MUC1; interleukin;
 KW granulocyte-macrophage colony-stimulating factor; immunostimulant;
 KW cystostatic; vaccine; CTL epitope.
 XX
 OS Homo sapiens.
 XX
 PN WO2004096238-A1.
 XX
 PD 11-NOV-2004.
 XX
 XX
 PF 01-APR-2003; 2003WO-US010096.
 XX
 XX 01-APR-2003; 2003WO-US010096.
 XX
 XX (CENZ) GENTOCOR INC.
 PA (GOLE/) GOLETZ T J.
 PA (MCCA/) MCCARTHY S G.
 PA (SCAL/) SCALLON B J.
 PA (SNYD/) SNYDER L A.
 PA (BRAN/) BRANIGAN P J.
 XX
 XX Goletz TJ, McCarthy SG, Scallion BJ, Snyder LA, Branigan PJ;
 PI Knight DM;
 XX
 XX WPI; 2004-804620/79.
 DR N-PSDB; ADU49633.
 DR
 XX
 XX Composition comprising polynucleotide encoding antigenic determinant of
 PT tumor-associated protein (eg prostate specific antigen) and nucleic
 PT adjuvant (eg interleukin-18) useful for eliciting immune response to
 PT cancer associated tumor protein.
 XX
 XX Disclosure; SEQ ID NO 56; 105pp; English.
 XX
 CC The invention relates to a new composition that comprises a first
 CC isolated polynucleotide encoding or complementary to an antigenic
 CC determinant of a tumour-associated protein and a second isolated
 CC polynucleotide encoding or complementary to a nucleic acid adjuvant. The
 CC composition further comprises at least one promoter sequence controlling
 CC expression of the polynucleotides and a carrier or adjuvant. The promoter
 CC polynucleotide is human cytomegalovirus immediate early promoter,
 CC dihydrofolatereductase promoter, early SV40 promoter or late SV40
 CC promoter. The tumour-associated protein is prostate specific antigen
 CC (PSA), kallikrein-2 (KLK2) or mucin-1 (MUC1). The nucleic acid adjuvant
 CC encodes human interleukin (IL)-18 IL-12, granulocyte-macrophage colony-
 CC stimulating factor or B7-1 or its variant. The first and second
 CC polynucleotides are contained in the same or separate nucleic acid
 CC vectors. The composition is useful in eliciting an immune response to a
 CC cancer associated tumour protein in a mammal. The present sequence
 CC represents a human MUC1 polypeptide CTL helper epitope.
 XX
 SQ Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 8; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 STAPPVHNV 9
 |||||
 Db 1 STAPPANGV 9
 RESULT 26
 ADX08604
 ID ADX08604 standard; peptide; 9 AA.
 XX
 AC ADX08604;
 XX
 DT 21-APR-2005 (first entry)
 XX
 XX
 DE Human MUC1 CTL helper epitope sequence.
 XX
 KW PSA; tumour-associated protein; prostate specific antigen; kallikrein-2;
 KW KLK2; mucin-1; MUC1; interleukin;
 KW granulocyte-macrophage colony-stimulating factor; immunostimulant;
 KW cystostatic; vaccine; CTL epitope.
 XX
 OS Homo sapiens.
 XX
 PN WO2004096238-A1.
 XX
 PD 11-NOV-2004.
 XX
 XX
 PF 01-APR-2003; 2003WO-US010096.
 XX
 XX 01-APR-2003; 2003WO-US010096.
 XX
 XX (CENZ) GENTOCOR INC.
 PA (GOLE/) GOLETZ T J.
 PA (MCCA/) MCCARTHY S G.
 PA (SCAL/) SCALLON B J.
 PA (SNYD/) SNYDER L A.
 PA (BRAN/) BRANIGAN P J.
 XX
 XX Goletz TJ, McCarthy SG, Scallion BJ, Snyder LA, Branigan PJ;
 PI Knight DM;
 XX
 XX WPI; 2004-804620/79.
 DR N-PSDB; ADU49633.
 DR
 XX
 XX Composition comprising polynucleotide encoding antigenic determinant of
 PT tumor-associated protein (eg prostate specific antigen) and nucleic
 PT adjuvant (eg interleukin-18) useful for eliciting immune response to
 PT cancer associated tumor protein.
 XX
 XX Disclosure; SEQ ID NO 56; 105pp; English.
 XX
 CC The invention relates to a new composition that comprises a first
 CC isolated polynucleotide encoding or complementary to an antigenic
 CC determinant of a tumour-associated protein and a second isolated
 CC polynucleotide encoding or complementary to a nucleic acid adjuvant. The
 CC composition further comprises at least one promoter sequence controlling
 CC expression of the polynucleotides and a carrier or adjuvant. The promoter
 CC polynucleotide is human cytomegalovirus immediate early promoter,
 CC dihydrofolatereductase promoter, early SV40 promoter or late SV40
 CC promoter. The tumour-associated protein is prostate specific antigen
 CC (PSA), kallikrein-2 (KLK2) or mucin-1 (MUC1). The nucleic acid adjuvant
 CC encodes human interleukin (IL)-18 IL-12, granulocyte-macrophage colony-
 CC stimulating factor or B7-1 or its variant. The first and second
 CC polynucleotides are contained in the same or separate nucleic acid
 CC vectors. The composition is useful in eliciting an immune response to a
 CC cancer associated tumour protein in a mammal. The present sequence
 CC represents a human MUC1 polypeptide CTL helper epitope.
 XX
 SQ Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 9; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 STAPPVHNV 9
 |||||
 Db 1 STAPPANGV 9
 RESULT 27
 ADY26204
 ID ADY26204 standard; peptide; 9 AA.
 XX
 AC ADY26204;
 XX
 DT 05-MAY-2005 (first entry)
 XX
 XX MHC Class I associated tumor and pathogen peptide, seq id 55.
 XX
 KW Immunosuppressive; microparticle; gene therapy; antisense therapy;
 KW vaccination; autoimmune disease; MHC Class I.
 XX
 OS Homo sapiens.
 XX
 PN US2005037086-A1.
 XX
 PD 17-FEB-2005.

Class I HLA-restricted widely expressed antigen #19.

vaccine; infection; viral infections; virucide; bacterial infection;
 antibacterial; yeast infection; fungicide; fungal infection;
 protozoal infection; protozoacide; cancer; cytostatic; melanoma;
 lung tumor; colon tumor; breast tumor; leukemia; autoimmune disease;
 multiple sclerosis; neuroprotective; rheumatoid arthritis; antiarthritic;
 antirheumatic; systemic lupus erythematosus; antiinflammatory;
 dermatological; immunosuppressive.

Unidentified.

WO2005011730-A1.

10-FEB-2005.

30-JUL-2004; 2004WO-GB003285.

01-AUG-2003; 2003GB-00018096.

(UNLO) QUEEN MARY & WESTFIELD COLLEGE.

Wang P, Li S;

WPI; 2005-152360/16.

New vaccine composition comprises inverted microsomes from animal cells
 with an externally disposed peptide antigen and a protein of the Major
 Histocompatibility Complex (MHC), useful for treating or preventing, e.g.
 cancer.

Disclosure; Page 53; 83pp; English.

The invention comprises a vaccine composition that consists of isolated
 inverted microsomes from an animal cell (or its membrane fragments), in
 association with an externally disposed peptide antigen and a protein of
 the MHC. The vaccine composition of the invention is useful for the
 prophylaxis or treatment of: infection (e.g. viral, bacterial, yeast,
 fungal or protozoal), cancer (e.g. melanoma, lung adenocarcinoma, colon
 cancer, breast cancer or leukemia), autoimmune disease (e.g. multiple
 sclerosis, rheumatoid arthritis or systemic lupus erythematosus). The
 present amino acid sequence represents a class I HLA-restricted widely
 expressed antigen.

Sequence 9 AA;

Query Match 79.6%; Score 39; DB 9; Length 9;

Best Local Similarity 77.8%; Pred. No. 2e+06;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 STAPPVHNV 9

|||||

Db 1 STAPPANGV 9

RESULT 27

ADY26204

ID ADY26204 standard; peptide; 9 AA.

AC ADY26204;

05-MAY-2005 (first entry)

MHC Class I associated tumor and pathogen peptide, seq id 55.

Immunosuppressive; microparticle; gene therapy; antisense therapy;
 vaccination; autoimmune disease; MHC Class I.

Homo sapiens.

US2005037086-A1.

17-FEB-2005.

XX 16-JAN-2004; 2004US-00758970.
 XX PF
 XX 19-NOV-1999; 99US-0166516P.
 PR 17-NOV-2000; 2000US-00715708.
 XX (ZYCO-) ZYCOS INC.
 XX PA
 XX Tyo M, Hsu Y, Hedley ML;
 PI WPI; 2005-180376/19.
 XX DR
 XX Scalable continuous preparation of nucleic acid-containing microparticles
 PT to treat autoimmune disease comprises solvent removal device and mixing
 PT chamber; and continuously supplying first emulsion and second aqueous
 PT solution to the chamber.
 XX PS
 XX Disclosure; SEQ ID NO 55; 36pp; English.
 XX CC
 XX The invention relates to the scalable continuous preparation of nucleic
 CC acid-containing microparticles (I) comprising providing a mixing chamber
 CC and a solvent removal device, continuously supplying a first emulsion and
 CC a second aqueous solution to the chamber, continuously transferring the
 CC second emulsion from the chamber to the solvent removal device, and
 CC removing the organic solvent from the second emulsion in the device to
 CC form an aqueous suspension of (I). (I) is used for delivery of a nucleic
 CC acid for gene therapy, antisense therapy, vaccination, treatment of
 CC autoimmune disease, and either specific or non-specific modulation of an
 CC immune response (e.g. via cytokine regulation). The scalable, continuous
 CC flow production of (I) maintains the structural integrity of the
 CC associated nucleic acid and results in a microparticle having a purity
 CC suitable for introduction into an animal (e.g. human) host. The
 CC preparation of (I) provides an economical, aseptic, scalable procedure
 CC for producing a microparticle in amounts necessary for research,
 CC clinical, and other commercial uses. (I) produced using scalable,
 CC continuous flow process contains stable, active, potent, structurally
 CC intact nucleic acid, e.g. as supercoiled DNA. The method also provides
 CC efficient encapsulation of the nucleic acid in the microparticle and
 CC allows for efficient recovery of the microparticle. The current sequence
 CC represents an MHC Class I associated tumor and pathogen peptide sequence.
 CC This sequence could be an expression product of a microparticle of the
 CC invention.
 XX SQ
 XX Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 9; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGHV 9
 RESULT 28
 ADZ66315
 ID ADZ66315 standard; peptide; 9 AA.
 XX AC
 XX ADZ66315;
 XX 14-JUL-2005 (first entry)
 DT DT
 DE MUC1 repeat unit (aa 14-20 + 1-2).
 XX KW
 KW Cytostatic; Aromatase inhibitor; Estrogen agonist; Estrogen antagonist;
 KW MUC1; polymorphic antigen; immunogen; breast cancer; anti-estrogenic;
 KW steroid agent; estrogenic steroid; immunological agent; immune response.
 OS Homo sapiens.
 OS Synthetic.
 XX PN
 XX WO2005037261-A1.

PD 28-APR-2005.
 XX 14-OCT-2004; 2004WO-US033988.
 XX PF
 XX 14-OCT-2003; 2003US-0510516P.
 PR 04-JUN-2004; 2004US-0576624P.
 XX PR
 XX (BIOM-) BIOMIRA INC.
 XX PA
 XX Kehoe-Whistance M, Maclean G;
 PI WPI; 2005-322772/33.
 XX DR
 XX Use of synergistic combination of anti-estrogenic steroids and
 PT immunological agents to treat breast cancer.
 PT immunological agents to treat breast cancer.
 XX PS
 XX Disclosure; Page 28; 103pp; English.
 XX CC
 XX This sequence represents an antigenic peptide derived from the MUC1
 CC repeat unit. MUC1 is a polymorphic antigen characterized by a variable
 CC number (typically 21-125, esp. 41 or 85) of perfect and imperfect repeats
 CC of peptide unit given in ADZ66304. MUC1 fragments may be used as
 CC immunogens in the method of the invention for treatment of breast cancer.
 CC The method comprises the administration of a combination of an anti-
 CC estrogenic steroid agent (A) (effective to reduce the level/activity of
 CC at least one estrogenic steroid) and an immunological agent (B)
 CC (effective to contribute to the development of a protective immune
 CC response to the breast cancer); where (A) and (B) are therapeutically
 CC effective against at least some breast cancers. (B) comprises at least
 CC one immunogen comprising at least one breast cancer-associated epitope;
 CC where at least one epitope is a MUC1 epitope or a carbohydrate epitope.
 CC The immunogen comprises S7n (an STn-KLH conjugate that is an aggregated
 CC conjugate having a NANA content of about 7 %). The antiestrogen comprises
 CC at least one (steroidal/non-steroidal) antiestrogen; where the steroidal
 CC antiestrogen is fulvestrant and the non-steroidal antiestrogen is
 CC toremifene, tamoxifen, droloxifene or trioxifene. The anti-estrogenic
 CC steroid agent comprises at least one aromatase inhibitor
 CC (aminoglutethimide, anastrozole, vorozole, letrozole, liarozole,
 CC megestrol, exemestane or formestane), preferably geoselin acetate or
 CC megestrol acetate. The method further comprises the administration of: at
 CC least one progestin (progesterone) that protects against breast cancer;
 CC at least one anti-progestin that protects against breast cancer; and at
 CC least one chemotherapeutic agent other than an anti-estrogenic steroid
 CC agent, where the chemotherapeutic agent is an anthracycline (doxorubicin,
 CC daunorubicin, epirubicin or idarubicin) or a taxane (paclitaxel or
 CC docetaxel). The combination of (A) and (B) is useful to treat breast
 CC cancer (metastatic breast cancer) and in the manufacture of one or more
 CC compositions for the treatment of breast cancer. (B) is useful in the
 CC manufacture of a composition for the treatment of breast cancer in a
 CC subject who is receiving or has received treatment with an anti-
 CC estrogenic steroid agent, effective to reduce the level or activity of at
 CC least one estrogenic steroid in the subject. (A) is useful in the
 CC manufacture of a composition for the treatment of breast cancer in a
 CC subject who is receiving or has received treatment with an immunological
 CC agent, effective to contribute to the development of a protective immune
 CC response to the breast cancer. The combination of (A) and (B) is
 CC synergistically effective against breast cancer. The combination of (A)
 CC and (B) is effective in the treatment of cancer. The synergistic effect
 CC of the combination of (A) and (B) to treat breast cancer was tested in
 CC patients. The results showed that the patients treated with the immunogen
 CC and the anti-cancer hormone had better time to disease progression (TDP)
 CC and survival outcome when compared to groups treated with (A) or (B)
 CC alone.
 XX SQ
 XX Sequence 9 AA;
 Query Match 79.6%; Score 39; DB 9; Length 9;
 Best Local Similarity 77.8%; Pred. No. 2e+06;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 STAPPVHNV 9
 |||||
 Db 1 STAPPAGHV 9

RESULT 29
 AAW67603
 ID AAW67603 standard; peptide; 9 AA.
 XX
 AC AAW67603;
 XX
 DT 02-MAR-1999 (first entry)
 XX
 DE Human MUC-1 derived T-cell activation 9-mer peptide.
 XX
 KW Activated T helper cell; CD4+; cytotoxic T cell; CD8+; liposome; epitope;
 KW peripheral blood lymphocyte; antigen-presenting cell; APC; virus; tumour;
 KW bacterium; parasite; cytokine; vaccine; cancer; malaria; HIV; hepatitis;
 KW tuberculosis; mucin.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9850527-A1.
 XX
 PD 12-NOV-1998.
 XX
 PF 07-MAY-1998; 98WO-US009288.
 XX
 PR 08-MAY-1997; 97US-0045949P.
 XX
 PA (BIOM-) BIOMIRA INC.
 XX
 PI Agrawal B, Krantz MJ, Reddish MA, Longenecker BM;
 XX
 DR WPI; 1999-034715/03.
 XX
 PT Method of activation of T cells - by exposure to antigen-presenting cells
 PT loaded with antigen in liposome, used for, e.g. treating cancer and
 PT microbial infections.
 XX
 PS Example 1; Page 30; 75pp; English.
 XX
 CC Peptides AAW67583-W67611 are used to produce activated T helper (CD4+) and cytotoxic (CD8+) T-cells. The activated T cells are produced by treating peripheral blood lymphocytes with liposome-encapsulated peptide antigen to generate Ag-loaded antigen-presenting cells (APC), contacting naive or anergic T-cells with these APC, and isolating the resulting activated T-cells. The cells are specific for a particular antigen, particularly one derived from a tumour, but also those from viruses, bacteria and other parasites. It can also be used to identify antigens and epitopes able to generate an Ag-specific T-cell response (by assessing proliferation and cytokine release). Also the Ag-loaded APC can be used as cellular vaccines for treating cancer (claimed) or other diseases (e.g. malaria, human immune deficiency virus infection, hepatitis, tuberculosis). The activated T-cells can be used to treat the same conditions by adoptive T-cell transfer therapy
 XX
 SQ Sequence 9 AA;
 Query Match 73.5%; Score 36; DB 2; Length 9;
 Best Local Similarity 66.7%; Pred. No. 2e+06;
 Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1 STAPPVHNV 9
 :|||||
 Db 1 ATAPPAGV 9
 RESULT 30
 AAR68012
 ID AAR68012 standard; peptide; 9 AA.
 XX
 AC AAR68012;
 XX
 DT 25-MAR-2003 (revised)

DT 05-SEP-1995 (first entry)
 XX
 DE Mucin peptide p8-16.
 XX
 KW Mucin; multiple tandem repeat; vaccine; pancreas cancer; breast cancer;
 KW ovary cancer; colon cancer; HIV.
 XX
 OS Synthetic.
 OS
 PN WO9503825-A1.
 XX
 PD 09-FEB-1995.
 XX
 PF 29-JUL-1994; 94WO-US008477.
 XX
 PR 30-JUL-1993; 93US-00099354.
 XX
 PA (FINN/) FINN O J.
 PA (FONT/) FONTENOT J D.
 PA (MONT/) MONTELLARO R C.
 XX
 PI Finn OJ, Fontenot JD, Montelaro RC;
 XX
 DR WPI; 1995-082033/11.
 XX
 CC Synthetic multiple tandem repeat mucin-1 peptides and analogues - have native conformation in the absence of glycosylation and are linked to epitopes; for vaccines and tests of cancer, viruses and bacteria.
 XX
 PS Disclosure; Page 54; 125pp; English.
 XX
 CC A synthetic peptide such as p105 (AAR68022) includes 5 tandem repeats of the mucin peptide given in AAR68004. The DTR motif, located between the first 2 prolines of each repeat, is the target of an anti-mucin immune response, and can be substituted by a sequence from a virus, tumor antigen or autoantigen. Drugs based on 9-amino acid portions (AAR68007-21) of the mucin peptide were developed. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 9 AA;
 Query Match 71.4%; Score 35; DB 2; Length 9;
 Best Local Similarity 85.7%; Pred. No. 2e+06;
 Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 STAPPVH 7
 :|||||
 Db 2 STAPPVH 8
 RESULT 31
 AAR68014
 ID AAR68014 standard; peptide; 9 AA.
 XX
 AC AAR68014;
 XX
 DT 25-MAR-2003 (revised)
 DT 05-SEP-1995 (first entry)
 XX
 DE Mucin peptide p10-18.
 XX
 KW Mucin; multiple tandem repeat; vaccine; pancreas cancer; breast cancer;
 KW ovary cancer; colon cancer; HIV.
 XX
 OS Synthetic.
 OS
 PN WO9503825-A1.
 XX
 PD 09-FEB-1995.
 XX
 PF 29-JUL-1994; 94WO-US008477.
 XX
 PR 30-JUL-1993; 93US-00099354.

```

XX (FINN/) FINN O J.
PA (FONNT/) FONTENOT J D.
PA (MONT/) MONTELARO R C.
XX
XX Finn OJ, Fontenot JD, Montelaro RC;
XX
XX WPI; 1995-082033/11.
XX
XX Synthetic multiple tandem repeat mucin-1 peptides and analogues - have
XX native conformation in the absence of glycosylation and are linked to
XX epitopes; for vaccines and tests of cancer, viruses and bacteria.
XX
XX Disclosure; Page 54; 125pp; English.
XX
XX A synthetic peptide such as p105 (AAR68022) includes 5 tandem repeats of
XX the mucin peptide given in AAR68004. The DTR motif, located between the
XX first 2 prolines of each repeat, is the target of an anti-mucin immune
XX response, and can be substituted by a sequence from a virus, tumor
XX antigen or autoantigen. Drugs based on 9-amino acid portions (AAR68007-
XX 21) of the mucin peptide were developed. (Updated on 25-MAR-2003 to
XX correct PN field.)
XX
XX SQ Sequence 9 AA;
XX
XX Query Match 71.4%; Score 35; DB 2; Length 9;
XX Best Local Similarity 85.7%; Pred. No. 2e+06;
XX Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2 TAPPVHV 9
XX      |||||
XX      1 TAPPAHV 8
XX
XX
XX RESULT 32
XX AAR68011
XX ID AAR68011 standard; peptide; 9 AA.
XX
XX AC AAR68011;
XX
XX 25-MAR-2003 (revised)
XX 05-SEP-1995 (first entry)
XX
XX Mucin peptide p7-15.
XX
XX Mucin; multiple tandem repeat; vaccine; pancreas cancer; breast cancer;
XX ovary cancer; colon cancer; HIV.
XX
XX Synthetic.
XX
XX WO9503825-A1.
XX
XX 09-FEB-1995.
XX
XX 29-JUL-1994; 94WO-US008477.
XX
XX 30-JUL-1993; 93US-00099354.
XX
XX (FINN/) FINN O J.
XX (FONNT/) FONTENOT J D.
XX (MONT/) MONTELARO R C.
XX
XX Finn OJ, Fontenot JD, Montelaro RC;
XX
XX WPI; 1995-082033/11.
XX
XX Synthetic multiple tandem repeat mucin-1 peptides and analogues - have
XX native conformation in the absence of glycosylation and are linked to
XX epitopes; for vaccines and tests of cancer, viruses and bacteria.
XX
XX Disclosure; Page 54; 125pp; English.
XX
XX A synthetic peptide such as p105 (AAR68022) includes 5 tandem repeats of

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CC the mucin peptide given in AAR68004. The DTR motif, located between the
CC first 2 prolines of each repeat, is the target of an anti-mucin immune
CC response, and can be substituted by a sequence from a virus, tumor
CC antigen or autoantigen. Drugs based on 9-amino acid portions (AAR68007-
CC 21) of the mucin peptide were developed. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
XX SQ Sequence 9 AA;
XX
XX Query Match 71.4%; Score 35; DB 2; Length 9;
XX Best Local Similarity 85.7%; Pred. No. 2e+06;
XX Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1 STAPPVH 7
XX      |||||
XX      3 STAPPAH 9
XX
XX RESULT 33
XX AAW72714
XX ID AAW72714 standard; peptide; 9 AA.
XX
XX AC AAW72714;
XX
XX 11-JAN-1999 (first entry)
XX
XX Mucin peptide preparation p 8-16.
XX
XX Mucin; muc-1; human; cancer; infectious disease; vaccine; diagnosis;
XX multiple tandem repeat; pancreatic cancer; breast cancer; colon cancer.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX US827666-A.
XX
XX 27-OCT-1998.
XX
XX 10-AUG-1994; 94US-00288059.
XX
XX 30-JUL-1993; 93US-00099354.
XX
XX (UYPI-) UNIV PITTSBURGH.
XX
XX Montelaro RC, Fontenot JD, Finn OJ;
XX
XX WPI; 1998-593988/50.
XX
XX Assay for cancer antibodies - using synthetic peptide comprising multiple
XX tandem repeats of muc-1.
XX
XX Disclosure; Col 25; 45pp; English.
XX
XX An assay has been developed for antibodies to pancreatic, breast or colon
XX cancer in a sample. The assay comprises contacting the sample with a
XX synthetic muc-1 peptide that comprises at least two 20 amino acid tandem
XX repeats of muc-1 and is capable of attaining native conformation in the
XX absence of glycosylation, and detecting any peptide-antibody complex
XX formation. The assay can be used in the diagnosis of e.g. pancreatic,
XX breast or colon cancer. The present sequence represents a mucin peptide
XX preparation from the present invention
XX
XX SQ Sequence 9 AA;
XX
XX Query Match 71.4%; Score 35; DB 2; Length 9;
XX Best Local Similarity 85.7%; Pred. No. 2e+06;
XX Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 1 STAPPVH 7
XX      |||||
XX      2 STAPPAH 8
XX
XX

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RESULT 34
AAW72713
ID AAW72713 standard; peptide; 9 AA.
XX
XX
AC AAW72713;
XX
XX
DT 11-JAN-1999 (first entry)
XX
XX
DE Mucin peptide preparation p 7-15.
XX
XX
KW Mucin; muc-1; human; cancer; infectious disease; vaccine; diagnosis;
KW Multiple tandem repeat; pancreatic cancer; breast cancer; colon cancer.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
PN US5827666-A.
XX
XX
PD 27-OCT-1998.
XX
XX
PF 10-AUG-1994; 94US-00288059.
XX
XX
PR 30-JUL-1993; 93US-00099354.
XX
XX
PA (UYPI-) UNIV PITTSBURGH.
XX
XX
PI Montelaro RC, Fontenot JD, Finn OJ;
XX
XX
WPI; 1998-593988/50.
XX
XX
Assay for cancer antibodies - using synthetic peptide comprising multiple
tandem repeats of muc-1.
XX
XX
PS Disclosure; Col 25; 45pp; English.
XX
XX
CC An assay has been developed for antibodies to pancreatic, breast or colon
CC cancer in a sample. The assay comprises contacting the sample with a
CC synthetic muc-1 peptide that comprises at least two 20 amino acid tandem
CC repeats of muc-1 and is capable of attaining native conformation in the
CC absence of glycosylation, and detecting any peptide-antibody complex
CC formation. The assay can be used in the diagnosis of e.g. pancreatic,
CC breast or colon cancer. The present sequence represents a mucin peptide
CC preparation from the present invention
XX
XX
SQ Sequence 9 AA;
Query Match 71.4%; Score 35; DB 2; Length 9;
Best Local Similarity 75.0%; Pred. No. 2e+06;
Matches 6; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2 TAPPVHV 9
DB 1 TAPPAGV 8
|||||
RESULT 35
AAW72716
ID AAW72716 standard; peptide; 9 AA.
XX
XX
AC AAW72716;
XX
XX
DT 11-JAN-1999 (first entry)
XX
XX
DE Mucin peptide preparation p 10-18.
XX
XX
KW Mucin; muc-1; human; cancer; infectious disease; vaccine; diagnosis;
KW Multiple tandem repeat; pancreatic cancer; breast cancer; colon cancer.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
PN US5827666-A.
XX
XX
PD 27-OCT-1998.
XX
XX
PF 10-AUG-1994; 94US-00288059.
XX
XX
PR 30-JUL-1993; 93US-00099354.
XX
XX
PA (UYPI-) UNIV PITTSBURGH.
XX
XX
PI Montelaro RC, Fontenot JD, Finn OJ;
XX
XX
WPI; 1998-593988/50.
XX
XX
Assay for cancer antibodies - using synthetic peptide comprising multiple
tandem repeats of muc-1.
XX
XX
PS Disclosure; Col 25; 45pp; English.
XX
XX
CC An assay has been developed for antibodies to pancreatic, breast or colon
CC cancer in a sample. The assay comprises contacting the sample with a
CC synthetic muc-1 peptide that comprises at least two 20 amino acid tandem
CC repeats of muc-1 and is capable of attaining native conformation in the
CC absence of glycosylation, and detecting any peptide-antibody complex
CC formation. The assay can be used in the diagnosis of e.g. pancreatic,
CC breast or colon cancer. The present sequence represents a mucin peptide
CC preparation from the present invention
XX
XX
SQ Sequence 9 AA;
Query Match 71.4%; Score 35; DB 2; Length 9;
Best Local Similarity 85.7%; Pred. No. 2e+06;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 STAPPVH 7
DB 3 STAPPVH 9
|||||
RESULT 36
AAE09534
ID AAE09534 standard; peptide; 9 AA.
XX
XX
AC AAE09534;
XX
XX
DT 19-NOV-2001 (first entry)
XX
XX
DE Human mucin-1 (MUC-1) VNTR peptide #3.
XX
XX
KW Mucin-1; cytostatic; immunostimulant; cell mediated immune response;
KW carcinoma; adenocarcinoma; breast cancer; dendritic cell; vaccine;
KW gene therapy; human; MUC-1.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200157068-A1.
XX
XX
PD 09-AUG-2001.
XX
XX
PF 01-FEB-2001; 2001WO-AU0000090.
XX
XX
PR 01-FEB-2000; 2000AU-00005369.
PR 14-JUN-2000; 2000US-00593870.
XX
XX
PA (AUST-) AUSTIN RES INST.
XX
XX
PI McKenzie IFC, Pietersz GA, Apostolopoulos V;
XX
XX
WPI; 2001-541537/60.
XX
XX
Immunostimulant peptide, used as an anti-carcinoma vaccine, comprises a
PT an epitope of the non-VNTR, non-leader region of a mucin.
XX
PS Disclosure; Page 38; 84pp; English.
XX
XX

```

CC The patent discloses peptide or polypeptides capable of eliciting an
 CC immune response, comprising an amino acid sequence corresponding to an
 CC epitope of the non-central portion of varying numbers of an amino acid
 CC motif (VNTR), non-leader region of a mucin. The peptides of the
 CC invention, fusion proteins comprising the peptide and conjugate compounds
 CC with carbohydrate polymers are used to induce a cell mediated immune
 CC response against mucin in the prevention or treatment of carcinoma,
 CC preferably adenocarcinoma, most preferably breast cancer. They are also
 CC used to pulse dendritic cell for in vivo transfer and use as a vaccine.
 CC They are also used in gene therapy. The present sequence is a VNTR
 CC peptide of mucin-1 (MUC-1) protein from human
 XX
 SQ Sequence 9 AA;

Query Match 71.4%; Score 35; DB 4; Length 9;
 Best Local Similarity 75.0%; Pred. No. 2e+06; Mismatches 2; Indels 0; Gaps 0;
 Matches 6; Conservative 0;

Qy 2 TAPPVHV 9
 |||||
 Db 1 TAPPAHGV 8

RESULT 37
 ADS87178
 ID ADS87178 standard; peptide; 9 AA.

XX
 AC ADS87178;

XX
 DT 18-NOV-2004 (first entry)

XX Genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide - SEQ ID 194.

XX vaccine; ubiquitin; Ub; T-cell target; melanoma; sarcoma;
 KW Hodgkins lymphoma; non-Hodgkins; leukaemia; neuroblastoma; myeloma;
 KW lung cancer; stomach; skin; thyroid; ovary; prostate; womb; pancreas;
 KW colon; bladder; breast; oesophagus; kidney; brain; epitope; MUC1.

XX Unidentified.

XX WO2004035085-A1.

XX 29-APR-2004.

XX 16-OCT-2003; 2003WO-JP013279.

XX 17-OCT-2002; 2002JP-00302816.

XX (KYUS-) KYUSHU TLO CO LTD.

XX Himeno K, Furue M, Maehara Y;

XX WPI; 2004-357144/33.

XX Gene vaccine containing cancer antigen genes ligated to ubiquitin genes
 PT or cytokine genes for prevention and treatment of cancer.

XX Disclosure; SEQ ID NO 194; 266pp; Japanese.

XX The invention relates to a novel genetic vaccine containing the ubiquitin
 CC gene together with a gene encoding an antigenic protein containing a T-
 CC cell target sequence. The vaccine of the invention may be useful for
 CC prevention and treatment of cancers including melanoma, sarcoma, lymphoma
 CC (Hodgkins or non-Hodgkins), leukaemia, neuroblastoma, myeloma and cancer
 CC of the lung, stomach, skin, thyroid, ovary, prostate, womb, pancreas,
 CC colon, bladder, breast, oesophagus, kidney or brain. The current sequence
 CC is that of a genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide
 CC of the invention.

XX Sequence 9 AA;

Query Match 71.4%; Score 35; DB 8; Length 9;
 Best Local Similarity 85.7%; Pred. No. 2e+06;

Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 STAPPVH 7
 |||||
 Db 2 STAPPAH 8

RESULT 38

ADS87177
 ID ADS87177 standard; peptide; 9 AA.

XX
 AC ADS87177;

XX 18-NOV-2004 (first entry)

XX Genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide - SEQ ID 193.

XX vaccine; ubiquitin; Ub; T-cell target; melanoma; sarcoma;
 KW Hodgkins lymphoma; non-Hodgkins; leukaemia; neuroblastoma; myeloma;
 KW lung cancer; stomach; skin; thyroid; ovary; prostate; womb; pancreas;
 KW colon; bladder; breast; oesophagus; kidney; brain; epitope; MUC1.

XX Unidentified.

XX WO2004035085-A1.

XX 29-APR-2004.

XX 16-OCT-2003; 2003WO-JP013279.

XX 17-OCT-2002; 2002JP-00302816.

XX (KYUS-) KYUSHU TLO CO LTD.

XX Himeno K, Furue M, Maehara Y;

XX WPI; 2004-357144/33.

XX Gene vaccine containing cancer antigen genes ligated to ubiquitin genes
 PT or cytokine genes for prevention and treatment of cancer.

XX Disclosure; SEQ ID NO 193; 266pp; Japanese.

XX The invention relates to a novel genetic vaccine containing the ubiquitin
 CC gene together with a gene encoding an antigenic protein containing a T-
 CC cell target sequence. The vaccine of the invention may be useful for
 CC prevention and treatment of cancers including melanoma, sarcoma, lymphoma
 CC (Hodgkins or non-Hodgkins), leukaemia, neuroblastoma, myeloma and cancer
 CC of the lung, stomach, skin, thyroid, ovary, prostate, womb, pancreas,
 CC colon, bladder, breast, oesophagus, kidney or brain. The current sequence
 CC is that of a genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide
 CC of the invention.

XX Sequence 9 AA;

Query Match 71.4%; Score 35; DB 8; Length 9;
 Best Local Similarity 85.7%; Pred. No. 2e+06; Mismatches 1; Indels 0; Gaps 0;
 Matches 6; Conservative 0;

Qy 1 STAPPVH 7
 |||||
 Db 3 STAPPAH 9

RESULT 39

ADS87166
 ID ADS87166 standard; peptide; 9 AA.

XX
 AC ADS87166;

XX 18-NOV-2004 (first entry)

XX Genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide - SEQ ID 182.

XX vaccine; ubiquitin; Ub; T-cell target; melanoma; sarcoma;
KW Hodgkins lymphoma; non-Hodgkins; leukaemia; neuroblastoma; myeloma;
KW lung cancer; stomach; skin; thyroid; ovary; prostate; womb; pancreas;
KW colon; bladder; breast; oesophagus; kidney; brain; epitope; MUC1.
XX Unidentified.
OS WO2004035085-A1.
XX 29-APR-2004.
XX 16-OCT-2003; 2003WO-JP013279.
XX 17-OCT-2002; 2002JP-00302816.
XX (KYUS-) KYUSHU TLO CO LTD.
XX Himeno K, Furue M, Maehara Y;
XX WPI; 2004-357144/33.
XX Gene vaccine containing cancer antigen genes ligated to ubiquitin genes
PT or cytokine genes for prevention and treatment of cancer.
XX Disclosure; SEQ ID NO 182; 266pp; Japanese.
XX The invention relates to a novel genetic vaccine containing the ubiquitin
CC gene together with a gene encoding an antigenic protein containing a T-
CC cell target sequence. The vaccine of the invention may be useful for
CC prevention and treatment of cancers including melanoma, sarcoma, lymphoma
CC (Hodgkins or non-Hodgkins), leukaemia, neuroblastoma, myeloma and cancer
CC of the lung, stomach, skin, thyroid, ovary, prostate, womb, pancreas,
CC colon, bladder, breast, oesophagus, kidney or brain. The current sequence
CC is that of a genetic vaccine/ubiquitin (Ub)/MUC1-related epitope peptide
CC of the invention.
XX
SQ Sequence 9 AA;
Query Match 71.4%; Score 35; DB 8; Length 9;
Best Local Similarity 75.0%; Pred. No. 2e+06; Mismatches 0; Indels 0; Gaps 0;
Matches 6; Conservative 0;
Qy 2 TAPPVHV 9
Db 1 TAPPAHV 8
RESULT 40
ID ABG73822
XX ABG73822 standard; peptide; 8 AA.
XX AC ABG73822;
XX 20-MAR-2003 (first entry)
XX MUC1 associated epitope.
XX Human; MUC1; mucin-1; cytostatic; antagonist; vaccine; tumour;
KW tumour-associated mucin-1; cancer; breast carcinoma; colon carcinoma;
KW oesophageal squamous cell carcinoma; pancreatic carcinoma;
KW prostate carcinoma; multiple myeloma; adenocarcinoma.
XX Homo sapiens.
XX US2002132771-A1.
XX 19-SEP-2002.
XX 26-NOV-2001; 2001US-00994466.
XX 18-AUG-1999; 99US-0149492P.
PR 11-NOV-1999; 99US-0164714P.

PR 18-AUG-2000; 2000US-00641833.
PR 28-NOV-2000; 2000US-00724094.
PR 21-FEB-2001; 2001US-0270456P.
PR 21-FEB-2001; 2001US-0270471P.
XX (MADI/) MADIYALAKAN R.
XX Madiyalakan R;
XX WPI; 2003-155898/15.
XX New therapeutic compositions comprising a binding agent that binds to
PT tumour-associated MUC1 epitope, useful for treating human tumors, e.g.
PT breast carcinoma, prostate carcinoma or multiple myeloma.
XX Example 24; Page 13; 27pp; English.
XX The invention relates to new therapeutic compositions, which comprise a
CC binding agent that specifically binds to an epitope of a tumour-
CC associated mucin-1 (MUC1), are effective for treating a mammal bearing a
CC tumour. Mice were implanted with 413BCR tumour cells 2 weeks after the
CC start of the immunisation series (using either a conjugate of the binding
CC agent, or a complex of the binding agent-MUC1). It was found that a
CC humoral response was induced in mice treated with both the conjugated and
CC complexed binding agent. A T2 cellular response to the binding agent was
CC induced in these mice. A trend for reduction in tumour mass and size in
CC mice treated with the conjugated or complexed binding agent was also
CC demonstrated. The therapeutic compositions or the method is useful for
CC treating a mammal (particularly a human) bearing a tumour, especially a
CC tumour that expresses a tumour-associated MUC-1. In particular, the
CC compositions are useful for treating adenocarcinomas, e.g. breast
CC carcinoma, colon carcinoma, oesophageal squamous cell carcinoma,
CC pancreatic carcinoma, prostate carcinoma, or multiple myeloma. The
CC present sequence represents the mucin-1 associated epitope
XX
SQ Sequence 8 AA;
Query Match 65.3%; Score 32; DB 6; Length 8;
Best Local Similarity 71.4%; Pred. No. 2e+06; Mismatches 1; Indels 0; Gaps 0;
Matches 5; Conservative 1;
Qy 1 STAPPVH 7
Db 2 TTAPPAH 8
RESULT 41
ID AAE26804 standard; peptide; 8 AA.
XX AC AAE26804;
XX 13-DEC-2002 (first entry)
XX Human HLA-A2.1 restricted MUC-1 (mucin) peptide epitope.
XX Human; cancer; breast cancer; ovarian cancer; melanoma; cell therapy;
KW epitope; human leucocyte antigen; HLA-A2.1.
XX Homo sapiens.
XX WO200265992-A2.
XX 29-AUG-2002.
XX 19-FEB-2002; 2002WO-US005748.
XX 20-FEB-2001; 2001US-0270252P.
XX (ORTH) ORTHO-MCNEIL PHARM INC.
XX Degraw J, Moriarty A, Leturcq DJ, Jackson MR, Peterson PA;
PI Heiskala M;

XX WPI; 2002-667033/71.

XX Treating a subject with cancer comprises combining the CD+8 cells, which

XX are stimulated with non-naturally occurring antigen-presenting cell line,

XX with adherent blood monocytes and inoculating the subject with CD8+

XX suspension.

XX Example 2; Page 93; 99pp; English.

XX The invention relates to a method of treating a subject with cancer. The

XX method involves combining the CD+8 cells, which are stimulated with non

XX naturally occurring antigen-presenting cell (nnAPC) line, with adherent

XX blood monocytes and inoculating the subject with CD8+ suspension. The

XX method is useful for treating cancer e.g. ovarian cancer, breast cancer

XX and melanoma etc. It is also useful in cell therapy. The present sequence

XX is human leukocyte antigen A2 (HLA-A2).1 restricted peptide epitope used

XX to treat breast and ovarian cancer

XX Sequence 8 AA;

XX

Query Match 64.3%; Score 31.5; DB 5; Length 8;

Best Local Similarity 88.9%; Pred. No. 2e+06;

Matches 8; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 STAPPVHNV 9

Db 1 STA-PVHNV 8

|||||

|||||

RESULT 42

AEA36310

ID AEA36310 standard; peptide; 8 AA.

AC AEA36310;

XX

XX 11-AUG-2005 (first entry)

XX

DE Human MUC-1 950-958 cytotoxic T-lymphocyte epitope peptide.

XX

XX viral infection; virucide; cytostatic; tumor; neoplasm; cell therapy;

XX antigen; MUC-1.

XX

OS Homo sapiens.

XX

XX JP2005139118-A.

XX

XX 02-JUN-2005.

XX

XX 07-NOV-2003; 2003JP-00377653.

XX

XX 20-FEB-2001; 2001US-0270252P.

XX

XX (ORTH) ORTHO-MCNEIL PHARM INC.

XX

XX Leturco DJ, Moriarty AM, Jackson MR, Peterson PA, Richards JM;

XX WPI; 2002-667033/71.

XX

XX Treating a subject with cancer comprises combining the CD+8 cells, which

XX are stimulated with non-naturally occurring antigen-presenting cell line,

XX with adherent blood monocytes and inoculating the subject with CD8+

XX suspension.

XX Disclosure; SEQ ID NO 20; 65pp; Japanese.

XX

XX The invention relates to a novel method for treating viral infection in a

XX subject. The method comprises preparing an antigen presentation cell

XX lineage (nnAPC), collecting CD8+ cells from the subject, stimulating CD8+

XX cells using the nnAPC, culturing CD8+ cells in the presence of

XX interleukin-2 (IL-2) and/or IL-7, mixing peripheral blood monocytes from

XX the subject, subjecting the components to gamma irradiation, combining

XX the CD8+ cells with adhesive peripheral blood monocytes and inoculating

CC the CD8+ suspended solid to the subject. The method of the invention

CC demonstrates virucide and cytostatic activities and may be useful for

CC treating a viral infection or tumor in a subject via cell therapy. The

CC creating sequence is that of a human MUC-1 cytotoxic T-lymphocyte epitope

CC peptide of the invention which was incorporated into a Drosophila antigen

CC presenting cell.

XX Sequence 8 AA;

Query Match 64.3%; Score 31.5; DB 5; Length 8;

Best Local Similarity 88.9%; Pred. No. 2e+06;

Matches 8; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 STAPPVHNV 9

Db 1 STA-PVHNV 8

|||||

|||||

RESULT 43

AAW38247

ID AAW38247 standard; peptide; 6 AA.

XX

AC AAW38247;

XX

XX 19-MAR-1998 (first entry)

DT

XX

XX Extended region between repeating loops of mucin.

XX

XX Multivalent chimeric peptide; tandem repeat unit; human; mucin 1; MUC1;

XX Omega loop sequence; prophylaxis; therapy;

XX pathogenic virus neutralisation; human immunodeficiency virus; HIV.

XX

XX Homo sapiens.

XX

XX WO9728187-A2.

XX

XX 07-AUG-1997.

XX

XX 29-JAN-1997; 97WO-US001726.

XX

XX 31-JAN-1996; 96US-00594403.

PR

PR 15-OCT-1996; 96US-00730244.

XX

XX (POPU-) POPULATION COUNCIL INC.

XX

XX Fontenot JD, Phillips DM;

XX

XX WPI; 1997-402551/37.

XX

XX New multivalent chimeric peptide(s) for neutralising pathogenic microbes

XX - comprising a loop structure of human mucin 1 and an omega loop of an

XX immunoglobulin superfamily protein.

XX

XX Disclosure; Page 39; 63pp; English.

XX

XX The present sequence was used in the development of a novel multivalent

XX chimeric peptide, comprising at least 2 tandemly repeated units, where

XX the 1st portion of the repeated unit comprises a human mucin 1 (MUC1)

XX sequence which forms an extended connector and a base of a loop structure

XX of human MUC1, and a 2nd portion comprising an immunoglobulin super

XX family protein Omega loop sequence. In the peptide, the natural structure

XX of MUC1 tandem repeats can be used to present an Omega loop sequence in a

XX functional conformation that is both multivalent and biologically active.

XX It can provide prophylactic and therapeutic agents which have the binding

XX specificity of an immunoglobulin super family member protein but do not

XX have the entire protein's backbone. It can be used to neutralise

XX pathogenic viruses, e.g. human immunodeficiency virus (HIV)

XX Sequence 6 AA;

Query Match 63.3%; Score 31; DB 2; Length 6;

Best Local Similarity 83.3%; Pred. No. 2e+06;

Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 TAPPVH 7
 DB 1 TAPPAH 6

RESULT 44
 AAB72482
 ID AAB72482 standard; peptide; 6 AA.
 XX
 AC AAB72482;
 XX
 DT 09-MAY-2001 (first entry)
 XX
 DE Fusion protein peptide fragment #16.
 XX
 KW Immunomodulatory; human milk fat globule specific antibody; HMPG; cancer;
 KW tumour detection.
 XX
 OS Unidentified.
 XX
 PN US6190885-B1.
 XX
 PD 20-FEB-2001.
 XX
 PF 08-OCT-1993; 93US-00134198.
 XX
 PR 02-FEB-1990; 90US-00473673.
 PR 08-APR-1993; 93US-00046103.
 XX
 PA (CANC-) CANCER RES FUND CONTRA COSTA.
 XX
 PI Ceriani RL, Peterson JA, Larocca DJ;
 XX
 DR WPI; 2001-217896/22.
 XX
 XX Novel fusion protein comprising sequence of amino acids which binds
 PT antibodies specific to human milk fat globule differentiation antigens,
 PT useful as immunogen and for diagnosing breast cancers.
 XX
 PS Claim 1; Col 29-30; 37pp; English.
 XX
 CC The present invention relates to a fusion protein (see AAB72464) which
 CC substantially fails to bind to human milk fat globule (HMPG) specific
 CC antibody. The fusion protein can be used as an immunogen and for
 CC diagnostic purposes and as part of a kit for detecting the presence of
 CC neoplastic tissue from a solid tumour or metastasis. The present sequence
 CC is a peptide which was used in the present invention
 XX
 SQ Sequence 6 AA;

Query Match 63.3%; Score 31; DB 4; Length 6;
 Best Local Similarity 83.3%; Pred. No. 2e+06;
 Matches 5; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 TAPPVH 7
 DB 1 TAPPAH 6

RESULT 45
 AAY82854
 ID AAY82854 standard; peptide; 9 AA.
 XX
 AC AAY82854;
 XX
 DT 19-JUN-2000 (first entry)
 XX
 DE Mucin peptide fragment (tumour associated antigen).
 XX
 KW Tumour associated antigen peptide; TAA; cancer; carcinoma; treatment;
 KW prevention; cure; anti-tumour vaccine; metastases; breast; bladder;
 KW prostate; pancreas; ovary; thyroid; colon; stomach; carcinoma;

KW MHC Class I; HLA-A2; human; Major Histocompatibility Complex; uroplakin;
 KW prostate specific antigen; prostate specific membrane antigen;
 KW prostate acid phosphatase; mucin; lactadherin;
 KW teratocarcinoma derived growth factor; PSA; PSMA; PAP; CRIPTO-1.
 XX
 OS Homo sapiens.
 XX
 PN W0200006723-A1.
 XX
 PD 10-FEB-2000.
 XX
 PF 29-JUL-1999; 99WO-IL000417.
 XX
 PR 30-JUL-1998; 98IL-00125608.
 XX
 PA (YEDA) YEDA RES & DEV CO LTD.
 PA (BIOT-) BIO-TECHNOLOGY GEN CORP.
 XX
 PI Eisenbach L, Carmon L, Tirosh B, Bar-Haim E, Paz A, Fridkin M;
 PI Fitzer-Attas C;
 XX
 DR WPI; 2000-205463/18.
 XX
 XX Tumor associated antigen peptides, especially derived from uroplakin,
 PT useful as vaccines to prevent or cure cancers including breast, bladder,
 PT prostate, pancreas, ovary, thyroid, colon and stomach.
 XX
 PS Claim 15; Page 102; 113pp; English.
 XX
 CC Tumour associated antigen peptides (TAA) may be used for the treatment,
 CC prevention and cure of cancer or cancer metastases. The cancer may be
 CC breast, bladder, prostate, pancreas, ovary, thyroid, colon, stomach, head
 CC or neck cancer or a carcinoma. The tumour associated antigens are
 CC presentable to the immune system by HLA-A2 molecules and are generally
 CC between 8 to 10 amino acids in length. The amino acids located at
 CC positions 2 and 9 of the tumour associated antigens are the anchor
 CC residues which participate in the binding to MHC class I molecules, more
 CC specifically HLA-A2. More tumour associated antigens are described in
 CC GENESQ records AAY82806-Y82882. Those tumour associated antigens
 CC described in records AAY82806-Y82824 and AAY82855-Y82869 are derived
 CC from Uroplakin, such as Uroplakin II, Uroplakin Ia, Uroplakin III and
 CC Uroplakin Ib. Those described in records AAY82825-Y82829 are derived from
 CC prostate specific antigen (PSA). Those described in records AAY82830-
 CC Y82835 are derived from prostate specific membrane antigen (PSMA). Those
 CC described in records Y82836-AAY82839 are derived from prostate acid
 CC phosphatase (PAP). Those described in records AAY82840-Y82846 are derived
 CC from Lactadherin (LA-46). Those described in records AAY82847-Y82854 are
 CC derived from Mucin and those described in records AAY82871-Y82882 are
 CC derived from Teratocarcinoma derived growth factor (CRIPTO-1)
 XX
 SQ Sequence 9 AA;

Query Match 63.3%; Score 31; DB 3; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 STAPPV 6
 DB 4 STAPPV 9

RESULT 46
 AAU00540
 ID AAU00540 standard; peptide; 9 AA.
 XX
 AC AAU00540;
 XX
 DT 12-SEP-2001 (first entry)
 XX
 DE Human MUC1 polypeptide derivative #1.
 XX
 KW Human; MUC1; antigenic peptide; major histocompatibility complex; MHC-I;
 KW glycoprotein; cytotoxic T lymphocytes; T cell response; cancer; vaccine;

KW cancer gene therapy; diagnosis; treatment; inflammatory disorder;
 KW organ transplant rejection; graft versus host disease.
 XX Homo sapiens.
 XX Key Location/Qualifiers
 FH 2..9
 FT Region
 FT /note= "Epitope"
 XX WO200118035-A2.
 XX 15-MAR-2001.
 XX PD
 XX PF 07-SEP-2000; 2000WO-EP008761.
 XX PR 08-SEP-1999; 99GB-00021242.
 XX PR 10-SEP-1999; 99EP-00402237.
 XX PR 03-MAR-2000; 2000US-0187215P.
 XX (TRGE) TRANSGENE SA.
 PA (INCR) IMPERIAL CANCER RES TECHNOLOGY LTD.
 XX Taylor-Papadimitriou J, Heukamp LC, Offringa R, Melief CJM;
 PI Acres B, Thomas M;
 XX WPI; 2001-235187/24.
 DR N-PSDB; AAS00586.
 XX New antigenic polypeptides of MUC-1 protein which activate cytotoxic T
 PT lymphocyte proteins and their analogs, useful for identifying a major
 PT histocompatibility complex class I restricted T cell response and for
 PT diagnosing cancer.
 XX Claim 2; Page 6; 8lpp; English.
 XX The sequence represents a human MUC1 polypeptide derivative. Derivative
 CC antigenic peptides of MUC1 protein bind at least one major
 CC histocompatibility complex class I (MHC-I) glycoprotein, which activates
 CC cytotoxic T lymphocytes to induce a protective response against tumours.
 CC Diagnosis of cancer involves determining the presence or absence in a
 CC host cell of MHC class I restricted T cell response to a MUC1 derivative,
 CC where the presence of the MHC class I restricted T cell response
 CC indicates that the host has cancer. Measurement of the level of MHC class
 CC I restricted T cell response is also useful to monitor the severity of
 CC cancer, a larger response indicating a more severe cancer. MUC1
 CC derivatives are useful in cancer therapy and to follow MUC1 specific
 CC immune responses in patients during the course of disease and/or
 CC treatment. MUC1 DNA is useful in cancer gene therapy, vaccination and
 CC diagnosis. Compositions of the sequences are used in vaccines and
 CC treatments against cancer or diseases caused by an immune response, such
 CC as an inflammatory disorder, organ transplant rejection or graft versus
 CC host disease
 XX Sequence 9 AA;
 SQ
 Query Match 63.3%; Score 31; DB 4; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 STAPPV 6
 Db 4 STAPPV 9
 RESULT 47
 ADB84181
 ID ADB84181 standard; peptide; 9 AA.
 XX ADB84181;
 AC ADB84181;
 XX 04-DEC-2003 (first entry)
 DT Human MUC1-derived peptide MUC(167-175) SEQ ID NO:8.
 XX
 DE
 human; immune system; immunostimulatory; CpG dinucleotide;
 immunostimulant; MUC1.
 XX Homo sapiens.
 OS WO2003066649-A1.
 PN 14-AUG-2003.
 PD 04-FEB-2003; 2003WO-CA000135.
 PF 04-FEB-2002; 2002US-0353195P.
 PR (BIOM-) BIOMIRA INC.
 PA Jiang Z, Koganty RR, Yalamati D, Baek M;
 PI WPI; 2003-767230/72.
 DR Stimulation of immune system involves administration of immunostimulatory
 PT molecule comprising at least one oligonucleotide strand having at least
 PT one nucleotide sequence and at least one covalently incorporated
 PT lipophilic group.
 XX Disclosure; Page 85; 95pp; English.
 PS The invention relates to a novel method for stimulating an immune system.
 CC The method involves administering an immunostimulatory molecule of
 CC covalently lipidated oligonucleotides comprising the CpG dinucleotide
 CC unit, or an analogue. The method of the invention has immunostimulant
 CC activity. The invention is useful in the manufacture of a composition for
 CC immunostimulating a subject. The present sequence is used in the
 CC exemplification of the invention.
 XX Sequence 9 AA;
 SQ
 Query Match 63.3%; Score 31; DB 7; Length 9;
 Best Local Similarity 100.0%; Pred. No. 2e+06;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 STAPPV 6
 Db 4 STAPPV 9
 RESULT 48
 ADB88876
 ID ADB88876 standard; peptide; 9 AA.
 XX ADB88876;
 AC ADB88876;
 XX 29-JAN-2004 (first entry)
 DT Human MUC1 peptide SEQ ID NO:8.
 XX
 DE
 glycolipopeptide; cytostatic; antibacterial; virucide; antiparasitic;
 KW vaccine; gene therapy; immunotherapeutic; cancer; cross-reactive epitope;
 KW immune response; parasite; MUC1.
 XX Homo sapiens.
 OS WO2003089574-A2.
 PN 30-OCT-2003.
 PD 09-APR-2003; 2003WO-US010750.
 PF 15-APR-2002; 2002US-0372105P.
 XX 06-MAY-2002; 2002US-0377595P.
 PR (BIOM-) BIOMIRA INC.
 PA

PI Koganty RR, Jiang Z, Yalamati D, Gandhi S, Budzynski W;
PI Krantz MJ, Longenecker BM;
XX WPI; 2003-865440/80.
XX
XX New glycolipopeptide comprising a disease-associated epitope or a
PT lipidated interior amino acid, useful as an immunotherapeutic, as a
PT vaccine against cancers and pathogens (e.g. virus or bacteria), or as
XX diagnostic reagents.
XX
XX Disclosure; SEQ ID NO 8; 167pp; English.
XX
XX The invention relates to a novel non-naturally occurring glycolipopeptide
XX comprising at least 5 amino acids, at least one amino acid being a
XX glycosylated amino acid and at least one amino acid being a lipidated
XX amino acid, where at least one lipidated amino acid is an interior amino
XX acid, the glycolipopeptide comprising at least one disease-associated
XX epitope. A peptide of the invention has cytostatic, antibacterial,
XX virucide, and antiparasitic activity, and may have a use as a vaccine,
XX and in gene therapy. The glycolipopeptide is useful as an
XX immunotherapeutic or as a vaccine against cancers and pathogens (e.g.
XX microbes, toxins, parasites or viruses) presenting cross-reactive
XX epitopes, or as diagnostic reagents. The lipidated amino acid is useful
XX for specific modulation of immune responses to an antigen. The present
XX sequence is used in the exemplification of the invention.
XX
XX Sequence 9 AA;
XX
XX Query Match 63.3%; Score 31; DB 7; Length 9;
XX Best Local Similarity 100.0%; Pred. No. 2e+06;
XX Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 STAPPV 6
XX Db 4 STAPPV 9
XX
XX RESULT 49
XX ADZ66308
XX ID ADZ66308 standard; peptide; 9 AA.
XX
XX AC ADZ66308;
XX
XX DT 14-JUL-2005 (first entry)
XX
XX DE MUC1 (167-175).
XX
XX Cytostatic; Aromatase inhibitor; Estrogen agonist; Estrogen antagonist;
XX MUC1; polymorphic antigen; immunogen; breast cancer; anti-estrogenic;
XX steroid agent; estrogenic steroid; immunological agent; immune response.
XX
XX Homo sapiens.
XX OS Synthetic.
XX
XX WO2005037261-A1.
XX
XX 28-APR-2005.
XX
XX 14-OCT-2004; 2004WO-US033988.
XX
XX 14-OCT-2003; 2003US-0510516P.
XX
XX 04-JUN-2004; 2004US-0576624P.
XX
XX (BIOM-) BIOMIRA INC.
XX
XX Kehoe-Whistance M, Maclean G;
XX
XX WPI; 2005-322772/33.
XX
XX Use of synergistic combination of anti-estrogenic steroids and
XX immunological agents to treat breast cancer.
XX
XX Disclosure; SEQ ID NO 5; 103pp; English.

XX This sequence represents an antigenic peptide derived from MUC1. MUC1 is
CC a polymorphic antigen characterized by a variable number (typically 21-
CC 125, esp. 41 or 85) of perfect and imperfect repeats of peptide unit
CC given in ADZ66304. MUC1 fragments may be used as immunogens in the method
CC of the invention for treatment of breast cancer. The method comprises the
CC administration of a combination of an anti-estrogenic steroid agent (A)
CC (effective to reduce the level/activity of at least one estrogenic
CC steroid) and an immunological agent (B) (effective to contribute to the
CC development of a protective immune response to the breast cancer); where
CC (A) and (B) are therapeutically effective against at least some breast
CC cancers. (B) comprises at least one immunogen comprising at least one
CC breast cancer-associated epitope; where at least one epitope is a MUC1
CC epitope or a carbohydrate epitope. The immunogen comprises 57n (an STn-
CC KLNH conjugate that is an aggregated conjugate having a NANA content of
CC about 7 %). The antigenic agent comprises at least one (steroidal/non-
CC steroidal) antiestrogen; where the steroidal antiestrogen is fulvestrant
CC and the non-steroidal antiestrogen is toremifene, tamoxifen, droloxifen
CC or trioxifene. The anti-estrogenic steroid agent comprises at least one
CC aromatase inhibitor (aminoglutethimide, anastrozole, vorozole, letrozole,
CC liarozole, megestrol, exemestane or formestane). Preferably geoselin
CC acetate or megestrol acetate. The method further comprises the
CC administration of: at least one progestin (progesterone) that protects
CC against breast cancer; at least one anti-progestin that protects against
CC breast cancer; and at least one chemotherapeutic agent other than an anti-
CC -estrogenic steroid agent, where the chemotherapeutic agent is an
CC anthracycline (doxorubicin, daunorubicin, epirubicin or idarubicin) or a
CC taxane (paclitaxel or docetaxel). The combination of (A) and (B) is
CC useful to treat breast cancer (metastatic breast cancer) and in the
CC manufacture of one or more compositions for the treatment of breast
CC cancer. (B) is useful in the manufacture of a composition for the
CC treatment of breast cancer in a subject who is receiving or has received
CC treatment with an anti-estrogenic steroid agent, effective to reduce the
CC level or activity of at least one estrogenic steroid in the subject. (A)
CC is useful in the manufacture of a composition for the treatment of breast
CC cancer in a subject who is receiving or has received treatment with an
CC immunological agent, effective to contribute to the development of a
CC protective immune response to the breast cancer. The combination of (A)
CC and (B) is synergistically effective against breast cancer. The
CC combination of (A) and (B) is effective in the treatment of cancer. The
CC synergistic effect of the combination of (A) and (B) to treat breast
CC cancer was tested in patients. The results showed that the patients
CC treated with the immunogen and the anti-cancer hormone had better time to
CC disease progression (TDP) and survival outcome when compared to groups
CC treated with (A) or (B) alone.
XX
XX Sequence 9 AA;
XX
XX Query Match 63.3%; Score 31; DB 9; Length 9;
XX Best Local Similarity 100.0%; Pred. No. 2e+06;
XX Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 1 STAPPV 6
XX Db 4 STAPPV 9
XX
XX RESULT 50
XX AAB31282
XX ID AAB31282 standard; peptide; 8 AA.
XX
XX AC AAB31282;
XX
XX DT 20-APR-2001 (first entry)
XX
XX DE Antigenic peptide derived from a human MUC1 protein.
XX
XX MUC1; epithelial cell mucin; tumour; MUC1 ligand; cancer.
XX
XX Synthetic.
XX OS Homo sapiens.
XX
XX WO200077031-A2.

XX 21-DEC-2000.
PD
XX 15-JUN-2000; 2000WO-CA000711.
PF
XX
XX 15-JUN-1999; 99US-0139263P.
PR
XX
XX (UYHE-) UNIV HEALTH NETWORK.
PA
XX
XX Gariepy J, Yang S;
PI
XX
XX WPI; 2001-091388/10.
DR
XX
XX Novel ligands that binds to MUC1, an epithelial cell mucin, useful for
PT diagnosing, monitoring, treating and preventing cancer.
PT
XX
XX Example 2; Page 26; 60pp; English.
PS
XX
XX The present sequence represents a peptide derived from a human MUC1
CC protein. MUC1 is an epithelial cell mucin, which is found on, and shed
CC from, the surface of many tumours. The specification describes ligands
CC that bind to MUC1. These ligands were isolated using a phage display
CC technique using MUC1 tandem repeats as the target. The MUC1 tandem target
CC repeats comprise repeats of the peptide AAB31258. The ligands are useful
CC for detecting the presence of MUC1 in a sample, to treat or prevent
CC cancer associated with MUC1 and to prepare a medicament or diagnostic
CC agent to treat, prevent or detect cancer associated with MUC1. By
CC assaying for the binding between the MUC1 ligand and MUC1 in a sample
CC diagnosis or monitoring of cancer can be carried out. The ligands may
CC also be used to prepare antibodies
XX
SQ Sequence 8 AA;

Query Match 61.2%; Score 30; DB 4; Length 8;
Best Local Similarity 71.4%; Pred. NO. 2e+06;
Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 3 APPVHNV 9
||| |
Db 1 APPAHGV 7

Search completed: February 24, 2006, 10:14:28
Job time : 208 secs